



December 1994



FCC Highlights * ARRL Report * VE Exams Schedule * Public Service Report
DX Column * Elmer's Corner * Club Reports * Want Ads * Much More



Be a Know it All, Read Auto-Call!

Auto-Call is the Official Journal of the Foundation For Amateur Radio, Inc.®

THE NEW GENERATION ROTATORS

THEY'RE NOT YOUR FATHER'S HAM "M"

Rotator Comparison Chart

Model/Specs	The New Generation									Old Generation	
	Create RCS	Create RCSA	Create RCSB	Emoto 105TSX	Emoto 747SRX	Emoto 1105MSX	Emoto 1200FXI	Emoto 1300MSX	Emoto 1800FSX	Tees HamV	Tees TXZ
Rotate Torque Ft/Lb	43	116	160	37	50	57	143	215	287	67	83
CDR Right Ant Inertia	N/A	N/A	N/A	100	400	700	1000	1800	3000	N/A	N/A
Brk Static Torque Ft/Lb	508	1085	1450	215	502	717	1290	1792	2150	417	750
Wind Load in Tower (lb)	10	25	25	11	22	27	27	33	36	15	20
Mast mount	4	5	7	5	9	12	12	15	16	7.5	10
Rotating speed 360°	60-150 sec variable	60-150 sec variable	60-150 sec variable	55	35	65	40	77	80	60	60
Rev Delay	None	2 sec	3 sec							None	None
Pre-set	Opt 3	Opt 3	yes	no	no	Opt	yes	yes	yes	no	no
Computer	no	no	no	no	yes	yes	yes	yes	yes	no	no
Power 120V 60Hz	80VA	140VA	200VA	70VA	70VA	70VA	90VA	120VA	150VA	26V AC	26V AC
Mast Dia	2-2.5 in	2-2.5 in	2-2.5 in	1-2-2.4 in	1-2-2.4 in	1-6-2.4 in	1-6-2.4 in	2-4-3.1 in	3-5-5.5 in	2 in	2 in
Control wire	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	7 cond	8 cond	8 cond
Vertical max load #	880	1540	1540	660	1100	880	1760	1760	2200	400	800
Motor wgt #	13	17	20	7.5	9	11	11	13	38.5	24	28
Brake type	worm drive	worm drive	worm drive	disk	friction	friction	friction	friction	friction	wedge	wedge
Self center mast clamp	yes	yes	yes	Adj	Adj	Adj	Adj	Adj	Adj	no	no
Sealed notes	3-6	3-6	3-6	6	1-6	6	2-6	6	6	4-7	4-7
Pricing (\$)	\$289.00	\$449.95	\$799.00	\$209.95	\$399.00	\$589.00	\$799.00	\$1099.00	\$1272.00	\$369.95	\$439.95
With Pre-set	\$379.00	\$528.95				\$663.00					

Notes

1. Turns Tribander 470° in 36 seconds
 4. TXZ and HamV have same motor and gear train parts
 5. 120V normal 220V special order

2. Variable speed 40 sec max
 3. EEB prices as of 5/91, subject to change
 6. Wind Load in 50 Feet

3. Variable speed w/SCR constant rotational torque at any speed
 6. 120/220 taped transformer

THE NEW GENERATION

An entire generation of amateurs have grown up knowing only one rotator manufacturer. Those old favorites are still popular. But, now a new generation of rotators are out to set high standards with innovative features such as: large machined steel gears, cast and machined aluminum cases, solid state controllers for smooth start/stop, preset, computer control and circular position indicators.

The bottom line is... strong, long term reliability, ease of operation and cost effectiveness. When you erect an antenna system the last thing you need is rotor problems!

CREATIVE DESIGN ROTATORS

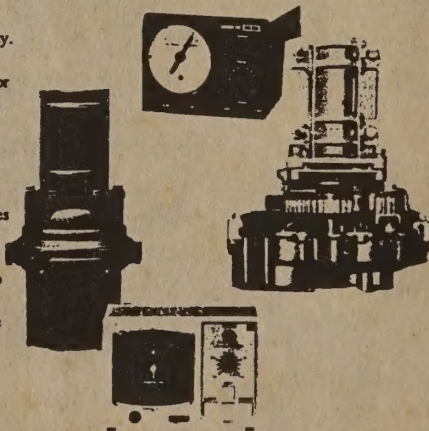
CREATE is serious about long term reliability. The CREATE RCS series rotators were designed with the serious DX'er in mind. Three models for medium, large and ultra large antenna arrays are available.

ROTOR FEATURES OF RCS SERIES

* Large strong reduction gear system provides long term reliability during years of rugged operation. * Worm drive gearing provides powerful braking force and low backlash to keep your antenna in position during severe weather conditions. * Cast and machined aluminum case provide the strength required for long lasting service. * Mast clamp guides for ease of mast installation.

CONTROLLER FEATURES OF RCS SERIES

* Speed control using silicon control rectifiers allows slow speed without reduction in rotation torque. Rotating speed is constant 60 to 200 seconds per 360 degrees. * Reverse delay control (RDC). Delays reverse command to rotor until antenna is at rest. Prevents damage to rotor antenna and tower system. * Circular dial indicator, for quick accurate reading of antenna direction. Great circle overlay available for USA (west-cent-east). * Preset (on 3 models) a must for quick setting of antenna direction. Just turn the knob to the new heading, the rest is automatic. Won't waste your time holding down the brake lever and wait.



EMOTO ROTATORS

More than 60% of all Japan amateurs use EMOTO rotators. Many unique innovations and international patents have made EMOTO number one.

EMOTO has a fool proof method to calculate which of their rotators will satisfy your needs. This GD2 formula considers your antenna (s) weight, boom and longest element length. The EMOTO sheet is in metric so one must convert weight 2.2lbs= 1kg and length in meters 3.3ft=1 meter. Calculate your GD2 then compare EMOTO GD2 spec above.

$$GD^2 = W \times \frac{L^2 + B^2}{12}$$

Where: W: weight of antenna (kg)
 L: length of longest element (m)
 B: length of boom(m)

GD2 EXAMPLES: Kgm²

TH7DX (437), TH3JR (63), 205BA (675), DISC7-3 (1300), A3S (61), A4S (173), KLM KT34XA (378), 3 ELE TRIBAND (150), 6 ELE TRIBAND (400), 20M 5 ELE (750), 15M 6 ELE (650), 40M 2 ELE SHORT BOOM (240), 40M 2 ELE FULL BOOM (800), 80M 2 ELE (1500), STACK ARRAYS 10M 5 ELE (60), 15M 5 ELE (200), 20M 5 ELE (750), 60+200+750=1010

EMOTO also has a robust AZ-EL rotator that has computer I/O ports. For those working satellites or EME moon bounce the EV700D5X should do the job, as rotating torque is more than double the YAESU G5400B AZ-EL.

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Adams County Amateur Radio Society
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Amateur Radio Research and Development Corp.
AMSAT - Radio Amateur Satellite Corporation
Anne Arundel Radio Club
Antietam Radio Association, Inc.
ARINC Amateur Radio Club
Arlington Amateur Radio Club
Baltimore Amateur Radio Club
Baltimore Radio Amateur Television Society
Capital City Amateur Radio Society
Capital Hill Amateur Radio Society
Carroll County Amateur Radio Club
Central Maryland Amateur Radio Club
Chaverim of the Greater Washington Area
Columbia Amateur Radio Association
Culpeper Amateur Radio Association
D-MARC - Digital Mid-Atlantic Radio Council
Department of State Amateur Radio Club
Fauquier Amateur Radio Club
Frederick Amateur Radio Club
Frederick Amateur Repeater Group
Friendship Amateur Radio Club
Goddard Amateur Radio Club
Green Mountain Repeater Association
Herndon Repeater Group
IBM Amateur Radio Club
Johns Hopkins University APL ARC
Laurel Amateur Radio Club
Leisure World Amateur Radio Club
MD/DC MARS (Navy Marine) Association
MADRAS
Maryland Emergency Phone Net
Maryland FM Association
Maryland Mobileers Amateur Radio Club
Mercury Amateur Radio Assn., NE Area
Metropolitan Communications Network
Metiovision Amateur TV Club
Mid-Atlantic DX & Repeater Assn.

Montgomery Amateur Radio Club
Montgomery Auxiliary Communications Service
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Mount Vernon Amateur Radio Club
National Capitol DX Association
Naval Research Laboratory Radio Club
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North Point FM Association
Northern Virginia FM Association
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Opequon Radio Society
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Potomac Valley Radio Club
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Prince George's County ARES/RACES
Quarter Century Wireless Association, Inc.
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Vic Clark Chapter #91
Washington Chapter #23
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St. Mary's County Amateur Radio Association
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Southern Maryland Amateur Radio Club
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Springfield Estates Elementary School-ARC
Stafford Amateur Radio Assn.
Sterling Park Amateur Radio Club
Summit Amateur Radio Association
Tri-County Amateur Radio Club
T-MARC, Middle Atlantic Repeater Council
Vienna Wireless Society
Voice of America Amateur Radio Club
Washington Adventist Amateur Radio Assn.
Washington Area Young Ladies ARC
Woodbridge Wireless, Inc.

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Deadline for copy is the 5th of the month. All contributions are welcomed, but the editor does reserve the right to edit or reject any portion of any copy.

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AUTO-CALL is published monthly as the Official Journal of the Foundation for Amateur Radio, Inc. Comments made by columnists do not necessarily reflect the opinions of the Foundation. No effort is made to investigate advertisers, therefore no warranty can be applied.

AUTO-CALL has a paid subscription of over 1,700 and a total circulation of over 2,000. Copies are sold at local stores and a number of complimentary and swap copies are mailed each month. The magazine is entered as third class nonprofit matter at the Post Office at Arlington, VA.

Subscription Rate is \$8 per year.

Subscriptions received after the 15th of the month will begin with the following month's Issue.

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COMING EVENTS - 1995

- | | |
|-------------|--|
| Jan. 15 | Richmond Frostfest |
| Jan. 18 | B.A.R.C. Mini-Fest, Timonium, MD. |
| Jan. 22 | Columbia Area Amateur Club Hamfest, Lancaster, PA. |
| Jan. 29 | Maryland Mobileers ARC Swapfest, Odenton, MD. |
| *Feb. 19 | Cumberland County Winter Hamfest, Camp Hill, PA. |
| *Feb. 25 | Appalacian ARC Group Hamfest, Lebanon, PA. |
| Feb. 26 | Vienna Winterfest, Vienna, VA. |
| *Mar. 18-19 | Mecklenburg ARS, Charlotte, N.C. |
| *Mar. 12 | York Springfest, York, PA. |
| *Mar. 19 | Two Rivers ARC, Monroeville, PA. |
| Mar. 25-26 | Greater Baltimore Hamboree, Timonium, MD. |
| *Apr. 1 | Applichian, Lebabon, PA. |
| *Apr. 2 | Chesapeake ARS, Virginia Beach, VA. |
| Apr. 9 | Palm Sunday |
| *Apr. 10 | Penn-Del ARC Hamfest, New Castle, DE. |
| Apr. 16 | Easter Sunday |
| *Apr. 23 | Carroll County |
| *Apr. 28-30 | May Dayton Hamvention, Dayton, OH. |
| *Apr. 30 | Kent Island Hamfest, Grasonville, MD. |
| *May 7 | FAR/QCWA Annual Spring Banquet, Greenbelt, MD. |
| May 7 | Warminister ARC, Wrightstown, PA. |
| May 6-7 | Greenville, N.C., Hamfest |
| *May 14 | Roanoke Valley Hamfest, Vinton (Roanoke) VA. |
| May 14 | Mother's Day |
| May 14 | Armed Forces Day |
| May 14 | Triple States RAC, Wheeling, W.VA. |
| May 14 | Great Hagerstown MD. Hamfest |
| May 19-21 | Atlantic Div/N.Y. State Convention, Rochester, NY. |
| *May 28 | Maryland FM Assn. Hamfest, Howard Co. Fairgrounds |

*DATES NOT CONFIRMED

FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month.

Visitors are always welcome

**The next meeting will be on Dec. 14 in Takoma Park, Maryland
Columbia Union College Science Building Auditorium, Flower Avenue**

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Franklin Avenue, East on Franklin to Flower, South to the college)

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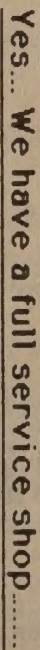
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AMERICAN RADIO RELAY LEAGUE REPORT by John Swafford, W4HU

The ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

AMSAT-NA ANNUAL MEETING DRAWS 240

More than 240 satellite-active amateurs gathered October 7 to 9 for the 12th Annual Meeting and Space Symposium of the Radio Amateur Satellite Corporation (AMSAT-NA). The conference, held in Orlando, Florida, marked the 25th anniversary of AMSAT.

The conference began with a SAREX overview and case study presented by Frank Bauer, KA3HDO; and Lou MacFadin, W5DID, and John Nichol, WD5EEV of NASA. Also on Friday, project manager David Liberman, XE1ITU, reported on the status of UNAMSAT, the first Mexican Amateur Radio satellite. The unit is "ready to go," awaiting an assignment to fly aboard a Russian launch vehicle.

On Saturday, Doug Loughmiller, KO5I, delivered a talk on the successful evolution of the UoSAT satellites. Peter Guelzow, DB2OS, updated the audience on the fate of OSCAR 13. Orbital analysis predicts re-entry of the satellite in early December 1996. Guelzow is even more specific, predicting a fiery end sometime between December 3 and 8.

After the presentation, Guelzow provided information--in an exclusive interview--concerning Russian Amateur Radio space projects. He said that the long-awaited RS-15 satellite was on indefinite hold. RS-15 is part of a commercial satellite intended to replace a bird already in orbit. The Russians have opted to wait until the active satellite reaches the end of its useful life before launching its replacement, that event could be several years away.

The popular OSCAR-21 satellite (with its FM repeater function) is also part of a Russian commercial bird. According to Guelzow, Russian ground controllers have officially abandoned the parent satellite, deactivating all systems except the OSCAR-21 module. What this means to the future of OSCAR-21 is uncertain. Guelzow said that the satellite may begin tumbling because of the lack of attitude control. This would make it very difficult for many hams to work OSCAR 21 successfully.

On the brighter side, Guelzow reported that progress was being made on upgrading the Amateur Radio facilities on board the Mir space station. Within two years Russian amateurs hope to have a 2-meter to 70-cm FM voice repeater on the space station. The system would also function as a packet digipeater. In addition, the cosmonauts plan to install gain antennas on the outer hull of the space station.

The highlight of Saturday afternoon was Phase 3D. Scheduled for launch in mid-1996, Phase 3D is the largest, most complex Amateur Radio satellite ever constructed. In a news conference, AMSAT-NA Executive Vice President Keith Baker, KB1SF, announced that Phase 3D would carry a 15-meter uplink in addition to uplinks on the VHF, UHF and microwave bands. Baker reported that assembly of Phase 3D was proceeding on schedule, at the integration facility on the Orlando International Airport grounds.

Funding continues to be a problem, according to Baker. When asked if the various AMSAT organizations had amassed enough funding to complete the satellite, Baker replied that they had. "The problem," he added, "is launching Phase 3D. We're scheduled to fly on the second launch of the new Ariane 5 rocket. We think the European Space Agency is going to want about 1.5 million dollars for the flight. That's what we need to work toward."

As part of the conference, AMSAT offered tours of the integration facility. For many members it was their first look at Phase 3D in the flesh. Sealed inside a "clean room" donated by Hitachi Corporation, the 7-foot-diameter satellite is mounted on a pivot system that allows the builders to rotate it as necessary. At the time of the conference, two propellant tanks were installed, along with the ammonia-filled heat pipes.

The final day of the conference focused on operational aspects. Dr H. Paul Shuch, N6TX, gave a presentation on demystifying Keplerian elements and orbital mechanics in general. Ed Krome, KA9LNV, discussed feed horns and other issues concerning Mode-S antennas. There were also a number of beginner's forums.-- Reported by QST Assistant Managing Editor Steve Ford, WB8IMY.

CONGRESS PASSES JOINT RESOLUTION

The League's joint resolution supporting Amateur Radio passed both houses of Congress in the wee hours of the morning of October 7.

In a last-ditch effort by Senators Charles Robb (D-VA), Wendell Ford (D-KY) and Alan Simpson (R-WY), Senate Joint Resolution 90 passed on the floor of the Senate under unanimous consent at 12:10AM. The bill asks for "reasonable accommodation" in the operation of Amateur Radio in homes, automobiles and public places.

The bill then went to the House, where it was brought up by Congressman Al Swift (D-WA) and passed unanimously at 2:45AM. Patricia Spurlock, a staffer for Robb, and Stephanie Vance, a staffer for Congressman Mike Kreidler D-WA), worked overtime on the bill. Kreidler introduced the original House version.

Passage was assisted by the efforts of David Leach, counsel to the House Energy and Commerce Committee, and Jerry Waldron and Colin Crowell of the House Telecommunication and Finance Subcommittee.

SURVEY MEASURES YOUNG HAMS' INTERESTS

"Youthnet," an informal on-line gathering of young radio amateurs, has initiated a survey of its members, and the results from the first 30 are in. While the net's organizers, Alex Leynes, N9KYJ, and Jennifer Finch, N9SAK, admit that "not enough young hams in the Amateur Radio community were interviewed for this survey (for it) to be very reliable," it does represent active youngsters; people who respond to surveys tend to be the "movers and shakers."

Here are the Youthnet questions and answers (as interpreted by Alex and Jennifer):

1. What made you interested in ham radio? "Most answered that a relative introduced them to ham radio. Two said that they bumped into the topic of ham radio while reading a book. Others were tired of 11 meters, and a few said they had a small background in remote control cars and planes."

2. Why do kids want to be hams? "This is a very diverse question. Many people said they wanted to talk to someone older than them at the same level. Others wrote that ham radio expanded their horizons in the field of electronics and science. Some said they liked the charm of contacting a person halfway around the world."

3. Are you more interested in building ham equipment or using it? "The majority of the responses said that building ham equipment today is too hard, and the know-how needed to build these projects is a bit of a reach for them. But they would build simpler things, such as antennas, or put together RG-58 cable."

4. Are there ham clubs for young hams? "All of the replies said, 'No, not in my area that, I know of,' except for one who helps run a club in a school."

5. What would young hams like to see more of in Amateur Radio? "The majority of the answers were 'more young hams like us to talk to'. But a few said that they are tired of being pushed by an older ham who doesn't like the young no-code Technicians.

6. As a young ham, do you think that you are well represented in national or local ham organizations? "Answers varied, depending on local ham clubs. Most said that they weren't well represented in the national clubs or organizations"

7. What do you talk about with adults on the air? "The majority of the answers were, 'Anything.' Some of responses said that the older hams were curious about what they did in school that day."

8. Are the testing requirements easy or hard for you? What do you want to see more of on the tests? "The majority of responses said that [they are] very easy, and should remain the same. Three said [they are] too easy, and should be made harder. Five told me that they should re-write the General and Technician tests, by placing the FM theory from the General theory into the Technician test.

9. How do you think ham radio is helping you in your everyday life? "The basic answers said that it helped with their speaking ability in public. Others said that it was very helpful when riding in a car for those 'just in case' emergencies. Some said it offered them a 'world perception' without leaving home. And there were those who answered that gave them chance to call home using autopatch when a phone wasn't available to them."

10. If You have parents who are not in the hobby, are they supportive? The majority said that parents are very supportive of them. Some said that their parents are supportive until they cause some television interference, or when they ask to install an antenna on the car during trips. But the majority said that the parents are supportive when it comes to antenna projects.

11. What aspect of Amateur Radio are you interested in (voice, CW, FM, AM, SSB, HF, VHF, UHF, ATV, packet, fax, DX, contest, special events, biking, hiking, etc...)? Answer: "All of them." (Ah, youth!) You can reach Youthnet by packet N9KYJ@W9ZMR.IL.USA.NOAM or by internet ALEXN9KYJ@AOL.COM and ALN9KYJ@MCS.COM

BRIEFS

- Elections for seats on the ARRL Board of Directors are under way. If you were a Full Member as of September 10, live in one of the following ARRL Divisions, and haven't received a ballot by November 1, contact HQ for a replacement: Central, Northwestern, Roanoke, and Rocky Mountain.

- Robert W. Jones, VE3CTM, has been elected director of the Radiocommunication Bureau of the International Telecommunication Union (ITU). Jones, 50, replaces the retiring director, Richard C. Kirby, W0LCT. Jones is director general of Canada's Radio Regulatory Branch, which regulates amateur and other radio services, and he attributes his professional interest in radio to his roots as a licensed radio amateur as a teenager in 1959.

- When Dr. Andrew J.N. Eardley, G3UXO, called HQ to take out an ARRL membership, he mentioned he'd worked all three amateur licensees aboard the space shuttle in September (STS-64). OM Eardley is the physician on board the RMS Queen Elizabeth II, and he used the QE II's amateur 2-meter FM equipment. Because the shuttle lays down a "radio footprint" as it passes overhead, "there isn't much competition," Dr Eardley said, "in the middle of the Atlantic Ocean."

- The next shuttle SAREX mission will be STS-67 next February.

- Fading sunspots and scarce DX got you depressed? Our annual group therapy session --- better known as the ARRL November Sweepstakes -- is right around the corner. This event features slower-speed CW meeting areas, lapel pins for participation and achievement, coffee mugs, and of course the usual winners certificates in many categories. Rules were on pages 124 and 125 of October QST.

- As part of its 50th anniversary celebration, CQ magazine announces in its November issue the "CQ Gang" award (sort of a mini-HPM 125, eh?). Any licensed amateur "currently or formerly associated with CQ, any of its sister publications, eg. Popular Communications, Communications Quarterly), or other products of its parent company" may sign "/50" after his call sign between January 1 and 15, 1995. This includes those who have written for CQ's publications.

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DX DX DX

By John Kanode, N4MM

DXAC RECOMMENDATION REJECTED BY ARRL AWARDS COMMITTEE

The ARRL Awards Committee has voted 5 to 2 against a DXAC recommendation that would set A minimum size for new DXCC countries. Those voting against shared the feeling that a -minimum size- rule was not needed.

Awards Committee Chairman, Chuck Hutchinson, K8CH, shared the results with DXAC Chairman, Bob Beatty, W4VQ, immediately after the vote. Standard Operating Procedure for the committees allows the DXAC to resubmit a recommendation (with or without changes) on appeal and Chairman Beatty has announced his intention to do so. DXAC Chairman Beatty has declared a moratorium on any new DXCC country petitions that may be affected by a minimum size rule. This moratorium will continue until such time as the deliberations on this issue are complete.

If and when the DXAC resubmits the recommendations with or without changes, and if the ARRL Awards Committee votes it down again the issue will come before the ARRL Board of Directors for final resolution.

UPCOMING DX CONTESTS

ARRL 160 Meter Contest	December 2-4
ARRL 10 Meter Contest	December 10-11
RAC Canada Winter Contest	December 31

UPCOMING DXPEDITIONS

Barbados	8P6CI/DC	December 4-12
North Cooks Is	ZK1KH	December 1994
Thailand	HS0/DL2VK	December 1994-May 1995
Falkland Is	VP8CQJ	October 18-February 20

TIDBITS

The IOTA Committee of the RSGB and Yaesu UK Ltd announced that they have entered into a sponsorship agreement by which Yaesu becomes the principal sponsor of the RSGB IOTA Program. The agreement is a world-wide agreement years from October 1, 1994. Under this will inject funds into the IOTA Program the IOTA Committee to finance its costs in running the program. Yaesu will secure advertising without charge in the IOTA Directory and the IOTA Anniversary Booklet. Yaesu will be making available on loan a portable station for use on IOTA DXpeditions and will supply QSL cards. EDITORS NOTE: I hope this agreement will include QSL Checkpoints to be set up at major Amateur Radio Conventions.

Bad news for the 701AA station in Yemen. According to Ahmed Nasser, equipment was stolen from the club station and it was set on fire by the north troops who occupy Aden. This country will move back up high on the most wanted list by DXers.

Kan, JA1BK is returning donations that were made for the P5RS7 DXpedition. The P5RS7 operation was not accepted for DXCC credit.

NCDXF slide and video programs are available from Ron, K6KEO. Contact Ron at his Callbook address. There is no charge to use the programs but the borrower must pay postage which is about \$6 round trip.

The recent Scarborough Reef (BS7H) operation will not count for DXCC. It took place from a man made structure next to the reef. This structure was out in the ocean, away from the reef. If Scarborough Reef is made a DXCC Country someday, another operation will have to take place with operators and equipment on the reef proper.

A team of Woodbridge Wireless members with others will be operating from Montserrat from March 1 through March 6. They will be operating in the ARRL International DX Contest signing the call VP2MFM. They will be active on 160-6 meters, CW/RTTY before and after the contest. The operators will be WB4NFS, WD4KXB, KJ4VG, KA4RRU, KO4FM, WA4PGM, W2HPF and W4MYA. QSL cards for this operation are via WD4KXB.

GRID-DIPPERS AND NOISE BRIDGES

How can you find the resonant frequency of an unknown tuned circuit or the impedance to “match” a resonant circuit? There are two different instruments you can build or buy that will let you do one or the other. Since you don’t need them all that often, it makes sense for a Club to own them and make them available for loan to members.

The first one to come along was what is still known as a “grid-dip meter”. A self-excited oscillator may be designed to be partially load sensitive and amplitude unstable so that if it is loosely coupled to another circuit it will act as a detector of loading if the coupled circuit is resonant as the oscillator frequency is tuned through it. This is a passive process in that the circuit under test doesn’t have to be energized, the grid-dip oscillator does that. In vacuum tube days a microammeter was placed in the tube grid circuit to measure the grid current of the oscillator. When the oscillator was tuned across the coupled circuit’s resonant frequency, the oscillator grid current would decrease (dip) indicating a resonant frequency of the coupled circuit. What a grid-dip meter consists of is a load sensitive oscillator with a tuned circuit that covers the frequency of interest. A wide frequency range (from 160 to 2 meters) is handled by a set of plug-in coils and a set of charts showing the oscillator frequency versus coil and capacitor dial settings.

Solid state versions of this instrument are just as useful and are still referred to as dippers.

You can use the grid-dip meter to determine individual circuit resonances like input and output circuit tuning, find parasitic resonant frequencies (to eliminate them), determine the resonant frequencies of antenna-transmission line combinations, tune the elements on a beam, set the resonant frequency of a trap, etc. The key to obtaining reliable results is how accurately the grid-dipper is calibrated. These days the grid-dipper oscillator may be heard on a receiver with a digital readout and calibrated

every time it is used. The device is small enough to hold in the palm of your hand.

The noise-bridge is another breed of cat and a little more sophisticated. It uses a bridge circuit which is a diamond shaped schematic fed with a signal input across opposite points, with the output measured across the other pair of opposite points. When the bridge is balanced by having equal impedance ratios in opposite arms, the output, no matter what the input, falls to zero, and the bridge is “balanced”. If you know (or have designed) three of the impedances, you can determine the value of the unknown fourth impedance that will “balance” the bridge.

A noise-bridge has a wide band noise generator (a Zener diode) an audio oscillator and an amplitude modulator so you can hear the output on an external AM receiver, and three arms of the bridge. The unknown impedance is connected to complete the open leg of the bridge and at balance the noise output as detected by the receiver suddenly nulls. Properly calibrated the noise bridge can determine the resistive and reactive components of the impedance in the fourth (unknown) leg under examination. The original noise bridges were developed to match 50 ohm sources to 50 ohm loads, but any impedance range can be used with a proper design. The noise bridge will indicate whether your antenna is too short or too long for the frequency and what values you need for proper matching network components.

In the days of building your own the old timers could come pretty close at guessing about tuned circuits by looking at size and shape. The rest was minor cut-and-try. For those who cut too much it was sometimes cut-and-cry. With these two tools, working on resonant circuits it made somewhat less frustrating. The SWR meter tells you you have a poor match, but it won’t tell you why. The noise bridge will.

PUBLIC INFORMATION COORDINATOR MARYLAND/DC SECTION

Melvin J. Morenz N3EKZ 416 Brooks Court
Glen Burnie, MD 21060-7616
Voice: (410) 760-9426
Packet: N3EKZ @ WB3V.MD.USA.NA

WORLD RADIOSPORT TEAM CHAMPIONSHIPS '95

The Potomac Valley Radio Club (PVRC)/ARRL/IARU will be hosting the WRTC '95 event in the Washington DC area in July 1995 during the IARU Contest. This World Class event requires a tremendous amount of support from individuals as well as the local clubs. The PVRC is looking for (preferably a club) to lead the logistics effort for this event. Individual volunteers are also desired, welcome, and encouraged to participate. We need your support!

Some of the areas where support is required include:

- ✱ **Host families:** to house teams that arrive from around the world. (approximately 50 teams are anticipated).
- ✱ **VHF coordination:** operators to coordinate information between sites during the contest.
- ✱ **Volunteer stations:** local operators to volunteer their stations to be operated by the various teams. Typically tribanders and wire antennas.
- ✱ **Transportation Director:** to organize transportation for the visiting operators.
- ✱ **Drivers:** to transport operators from their place of lodging to their operating site and return.
- ✱ **Recreational Director:** to organize the recreational activities for the visiting operators during the two weeks surrounding the contest in July 1995.
- ✱ **Tour Guides:** to ensure a coordinated event and accompany the guests.

Interested clubs should contact the WRTC '95 committee to schedule a presentation on the PVRC, their projected needs for WRTC '95 and how you can contribute to the success of this event.

A 20 minute video of WRTC '90 is also available for viewing at one of your upcoming club meetings.

To schedule a presentation, contact Brian Skutt ND3F at:

PH: H (410) 531-6596 PKT: ND3F @ WB3V.MD.USA
W (301) 317-3812

You have read about these types of events in the amateur magazines. This is your chance to be a part of it. Make yourself and your club available, do your part in making this World Class event a successful one. Contact Brian today. BE A VOLUNTEER, NOW IS THE TIME TO MAKE YOUR COMMITMENT!

SIMULATED EMERGENCY TEST '94

The SET '94 is over and was an apparent success. The communications plans were practiced, evaluated and will be updated or modified to fill any gaps that were noted during the event. Congratulations to all that participated.

PUBLIC INFORMATION OFFICERS

There are many of the ARRL Affiliated Clubs in the MDC Section that currently do not have an appointed PIO. If your club is not among those currently on the roster, please contact me for information on how you may make the public aware of your clubs activities. if your club is not an ARRL Affiliated (Club please contact the section's Affiliated Club Coordinator (ACC) Tony Young WA3YLO (or any of the Section Officials) on how your club may become affiliated and how to reap the benefits that go along with it.

Public Information Officers are appointed by and report to the Public Information Coordinator (PIC) generally upon the recommendation of an affiliated club and with the approval of the Section Manager (SM). PIOs are usually club publicity chairperson and must be full ARRL members.

CHANGES IN CLUB OFFICERS

With the beginning of the new year upon us, one of the changes that occurs with most clubs are new officers. Some clubs choose to elect new officers at other times of the year.

No matter when these changes occur, ensure that one of the items listed on the President's laundry list of "Things to Do" (or check the current ARRL Club President's Workbook under "Transition of Club Officers") includes the critical item of notifying ARRL HQ, the Division Director, Hugh Turnbull W3ABC, the Section Manager (SM) Bill Howard WB3V, the Affiliated Club coordinator (ACC) Tony Young W3YLO, and the Public Information Coordinator with the new names, addresses and phone numbers of your clubs new officers so that a current roster may be maintained and important news and other items from HQ are sent to the correct club officers.

If the officers are on packet, indicate how each officer may becontacted. If your club is not currently affiliated with the ARRL, please consider the benefits and request an application today (SASE's are appreciated).

Have a Happy and Safe Holiday Season!!!

73, Mel N3EKZ

The Foundation For Amateur Radio, Inc.



Washington, DC

TRAFFIC FUN

By Geri Sweeny, N4GHI

Folks utilizing HF on a regular basis generally are involved with: chatting (QSO's), contesting, DXing, and traffic handling. The beauty of traffic handling, aside from the enjoyment, is that it can be used in conjunction with the other three activities. Many messages pass letting people know about upcoming contests. They both inform (particularly Section contests) and thank people for their involvement in contests. Points are awarded for traffic handling on Field Day. QSL bureaus use messages to advise amateurs that cards are awaiting stamps and envelopes. Messages could even be used as a QSL verification, if the ARRL would sanction it. An ARRL Radiogram could be created for this purpose. While most of us like acquiring pictures and thus will always buy cards; a few may prefer a message, whether due to economics, or other reasons.

The following illustrates QSO usage.

NR 101 R K4JM 13 Richmond VA Oct 10

Paul Wisiolek K1TKL

15506 Gerkin Ave

El Camino Village CA 90260

Thanks for QSO and QSL x My card is on the way 73

Tom K4JM

How pleasing to reinforce a fine QSO with a follow-up contact. And, it's a chance for some good PR for traffic handlers.

ELECTRONIC ONE-STOP

Crofton Station Shopping Center
Rt. 424 & Rt. 3 - Crofton, Maryland

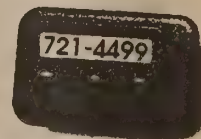
New Home Of The

"CELLULAR PHONE STORE"



Bob Saslaw
K3ZSB

Car Phones • Transportables • Hand Helds
Cellular Telephones And Accessories
Cellular Phone Numbers Activated
And Now The Areas Largest Selection Of
Pagers And Pager Accessories
Convert Your Pager To Our Service



Washington Local
(301) 261-3002
Crofton - Annapolis
(410) 721-4499

FCC HIGHLIGHTS

By Jack Kelleher, W4ZC

FCC Proposes to Auction Spectrum Shared by the Amateur Service

In previous columns, we discussed proposed allocation changes in the 2.4 GHz region of the spectrum, and their possible affect on use of Amateur Service secondary allocations at these frequencies (see October Autocall on "Spectrum auctions - what can we amateurs expect?", and November Autocall "Good Neighbors"),

On October 20 the FCC adopted a Notice of Proposed Rulemaking (ET Docket 94-32) to reallocate the 2390 - 2400, 2402 - 2417 and 4660 - 4685 MHz bands from federal government to commercial use. The proposal calls for licensing to be accomplished through competitive bidding

These bands are part of the 200 MHz mandated by Congress for reallocation from Federal Government uses to the private sector. The auction winners are expected to use their licenses to provide fixed and mobile services, entertainment broadcasts to aircraft, wireless local loop telephone service, broadcast auxiliary services to support high-definition TV, or low-power communications.

A Commission engineer commented that "The Commission is sensitive to the usage of amateurs, and we intend to explore and consider the ability of services to share the bands with amateur uses, but it's something that we have to see what kinds of comments come in." He said further that during a previous round of comments in this proceeding (see "Finding Good Neighbors", November Autocall). "A lot of the comments we received from manufacturers, a majority of them, didn't specifically address the need or ability to share with amateurs. So we hope to get feedback on that. Maybe that's something that the amateur community can really address, more specifically in reply comments to the manufacturers that are proposing services. You know, a lot of the amateur comments are very general about not being able to share with services. But I think we could get more specific."

(Editor's note: Specificity is a key factor in presenting the case for the amateur in these bands. Few of us, individually, can afford to conduct the kinds of experiments necessary to quantify the interference potential of a particular service to amateur users of a shared frequency band. Rather than making general comments, we would be well advised to support more sophisticated efforts to state our case. The American Radio Relay League, and some sympathetic commercial organizations can and have borne the brunt of this kind of defense in the past — and probably will do so in this and future cases. Maintaining the usability of these shared bands by amateurs is complicated by the fact that the Amateur Service is a Secondary Service. Secondary Services operate on a noninterference basis to the primary and permitted services. Stations of a secondary service:

- = Shall not cause harmful interference to stations of a primary or permitted service - - -
- = cannot claim protection from harmful interference from stations of a primary or permitted service -

This proposed reallocation involves more than the Amateur Service. In its earlier comment to the Department of Commerce on this matter, the FCC said that, with regard to the 2402 - 2417 MHz band, "Reallocation of this band would jeopardize the significant private sector investment already made in developing new technologies operating under Part 15. Considering the potentially adverse effects on the Amateur Radio Service and on use of the band by devices operating under Part 15, as well as the difficulties in using this band because of the amount of noise from ISM (Industrial, Scientific and Medical) devices, we believe that reallocation of this band presents less value to the private sector than any other band identified for reallocation."

(Note: Some of the foregoing was derived from a more lengthy article in the W5YI Report for November 1st 1994)

Amateur Licensing Procedures

On October 24 the FCC released an Order amending its Amateur Rules, effective December 20, 1994, as follows:

- ° To permit electronically filed data from VECs (paper applications also will still be accepted);

° To authorize operation as soon as the new license data appears in the amateur service licensee data base, rather than (as now) when the license document has been delivered (details of how the new licensee can determine his call sign will be announced later);

° To add a new rules section, "Examinee Conduct", to emphasize that an examinee must comply with the instructions given by the administering VEs;

° To treat "Technician Plus" as a license class;

° To provide for a "renewal short form" which the FCC says will be mailed to licensees in advance of their expiration date beginning sometime in 1995. The FCC added that renewal applications would be accepted no more than 90 days before the expiration date.

Because of the nature of these rule amendments, there is no notice of comment period required by federal law.

Special Licensing for visiting Foreign Amateurs

The FCC has terminated this proceeding without action. It was initiated in August 1992 (Docket 92-167), and proposed a special licensing procedure for visiting foreign amateurs. In dropping the proposal, the Commission cited comments filed opposing the plan, as well as suggestions for how better to accomplish what is a worthwhile goal. The FCC said it will "continue to explore other options and will work to ensure the reciprocal treatment of United States amateur operators — whether through bilateral or multilateral arrangements."

Tech License Renewal Glitch

Westlink Report for October 27 contains the following notice: "If you hold a Technician Class license issued before March 16, 1991, then you are automatically a "Technician Plus" licensee with some limited HF privileges. In some recent instances the FCC has processed the renewal or modification of such a Tech Plus license but has mistakenly issued a "Technician" (No-Code) license. Since June 8 of this year, new and renewed Tech Plus licenses have been clearly labeled as such.

"If this has happened to you, do the following: Write to the FCC explaining the situation, and include your current license status, with effective date. Include copies of both your "before" and "after" licenses. If you no longer have either a copy or the original of your previous license, say so in your letter.

"Send this to FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245, or fax (717) 337-1541. Keep copies of all your correspondence with the FCC. Expect the matter to take four to six weeks to be resolved. In the meantime, you may continue to exercise "Tech Plus" privileges."

The FCC is sixty years old!

In early October the FCC observed its 60th anniversary. The FCC hosted a cake-cutting ceremony on October 6th, complete with Commissioner Rachelle Chong reading "A poem to the Communications Act".

In 1934 President Roosevelt approved the Communications Act of 1934, which replaced the Federal Radio Commission and expanded its duties to include telegraph and telephone. Now, some 60 years and more than 100 modifications and amendments later, the Act occupies about 200 pages of a six by nine inch book entitled "Compilation of Selected Acts within the Jurisdiction of the Committee on Energy and Commerce, U.S. House of Representatives".

In 1934 the FCC had 233 employees, and a budget of \$1.14 million. It regulated a broadcast business consisting of 623 radio stations and a telephone industry with 14 million telephones and a revenue just under a million dollars.

Today the FCC has more than 1900 employees and a budget of \$160 million. There are more than 21,000 broadcasting stations (radio, TV and low power TV), and the total revenues of the telephone industry are nearly \$200 billion.

More on Morse

Rolf Jespersen, N3LA of Spring City, PA has filed with the FCC a Petition for Reconsideration of his November 1993 proposal for rulemaking (RM-8391) to reduce the Morse code speed requirements in the Amateur Extra and General license classes and to reduce the number of license classes from five to three. Jespersen asks the FCC to eliminate the Novice and Advanced Classes, leaving only the Technician, General, and Amateur Extra Classes. The minimum code requirement for the General Class would be 5 wpm; for Amateur Extra, 13 wpm. The written requirements for each of the proposed three classes would be 50 multiple choice questions.

Jespersen's petition concludes that "The benefits of adopting RM-8391 would be an increase in a much needed growth of the Radio Amateur community with a reduced burden to the Licensing Division in Gettysburg, and reduced delays in new and upgrade licensing".

Morse and ORACLE.

Our October column included a discussion of questions concerning the continuing need for Morse code proficiency as a requirement for an amateur license. Proposals such as Jespersen's (see the preceding item) appear from time to time seeking reduction or even elimination of the requirements for Morse code proficiency.

A New Zealand organization, ORACLE, proposes to eliminate the requirement from ITU Radio Regulation 2735, which now states that "Any person seeking a license to operate the apparatus of an amateur station shall prove that he is able to send correctly by hand and to receive correctly by ear texts in Morse code signals. The administrations concerned may, however, waive this requirement in the case of stations making use exclusively of frequencies above 30 MHz."

A comprehensive series of articles on the principles and objectives of ORACLE appears in three consecutive issues of Westlink Report; #681, September 1994; #682, October 13, and #683, October 27.

Growth of Technician Licensing

W5YI reports that, in the three years following the first No-Code Technician license, the Amateur Service grew by nearly 30% — double the growth rate of the preceding three years.

Technicians account for more than 113 thousand of the more than 146 thousand newcomers to ham radio between 1991 and 1994. Today there are more than 242 thousand Technician licensees, about 29 thousand of whom have passed a Telegraphy examination. More than 38% of all amateurs now hold a Technician Class license.

TRAINING CLASSES

New Editor **JOHN FORREST WZ4A** New Editor
6111 Burnett St.
Alexandria, VA 22310
(703)971-3905

Please send announcements for training classes and club training contacts to WZ4A at the above address. Deadline is the 25th of the 2nd month prior to the Autocall publication date (e.g., 25 November for the January issue).

CLASS ANNOUNCEMENTS

Upgrade Course

The Mount Vernon ARC will present an upgrade course for the General Class license beginning in January 1995. The course may be extended to the Advanced Class if demand warrants. The course will be held on a weekday evening in the Alexandria or Springfield area of Northern Virginia, both to be determined at a later date. For information contact: John Forrest WZ4A at (703)971-3905.

CLUB TRAINING CONTACTS:

Alexandria RC	Rich Adamy KA4GFY	(703)644-3920
Anne Arundel RC	Tony Young WA3YLO	(301)262-1917
Arlington ARC	Fred Bardsley WD4DHW	(703)533-0372
Antietam Rad Assn.	Robert Long KD3JK	(301)824-5132
Baltimore RATS	Joe Chidester W3SHZ	(410)602-0353
Baltimore ARC	Essex Community College	(410)780-6854
Fauquier ARC	Neil Spokes AB4YK	(703)364-3861
Frederick ARC	Steve Bauman W3FOA	(301)662-4552
Herndon Rep't Gp	Michael Weber WB8RDN	(703)450-2304
Laurel ARC	Pub Reaver W3DQI	(301)498-6293
Madras	Larry Ziecheck	(301)984-6112
MD Mobileers ARC	John Baugus N3JME	(301)551-3161
Montgomery ARC	Jane Rosenthal AA3CQ	(301)762-6262
Mt. Vernon ARC	John Forrest WZ4A	(703)971-3905
NASA/Goddard ARC	Vikki Gigante KA3PVS	(301)249-2609
Ole VA Hams ARC	John Fritsch N4YOB	(703)791-5995
Pentagon ARC	David Boyd K9MX	(703)659-6241
St. Marys Co. ARC		(301)862-2214
Shenandoah Val ARC	Guy Black W4PSJ	(703)722-4952
Southern MD ARC	Vic Curtis WA3YUV	(301)888-1388
Southern Pax ARC	Dwayne Kincaid WD8OYG	(301)586-2177
Springfield Est ARC	Will Schmitt KD4CNX	(703)768-5709
Stafford Adult Ed	Jerry Mullinix AC4HK	(703)659-3905
Sterling Park ARC	Mark Johnson WS3N	(703)430-3804
Tri-County ARC	John Creel WB3GXW	(703)572-5124
Vienna Wireless	Paul Wilkins AB4CY	(703)560-2779
Woodbridge Wireless	Cliff Deel KO4FM	(703)491-0841

**FOUNDATION FOR AMATEUR RADIO
VOLUNTEER EXAMINER COOPERATIVE**

JOHN FORREST WZ4A
6111 Burnett St.
Alexandria, VA, 22310
(703)971-3905

NOTICES:

* Effective July 1, 1994, the General Class written exam question pool (Element 3B) was changed. Be sure to use study materials appropriate for the current question pool.

ATTENTION VE'S: It's time to start scheduling your 1995 exams 1995 exam dates are now appearing in this column. Also, copies of the 1995 Autocall exam schedule will be distributed to local ham radio stores around the middle of December. Please send your 1995 exam schedule to WZ4A as soon as possible.

SCHEDULE OF EXAMINATIONS - 1994

NOVEMBER 23, 1994 (WEDNESDAY)

GLEN BURNIE, MD - MARYLAND MOBILEERS ARC (LAUREL VEC)
PRE-REGISTRATION REQUESTED - LIMITED WALK-INS
CONTACT: JERRY GAVIN NU3D (410)761-1423

DECEMBER 3, 1994 (SATURDAY)

VIRGINIA BEACH, VA - VA BEACH ARC (ARRL VEC)
PRE-REGISTRATION DESIRABLE
CONTACT: JUDY ROGERS KD4JMA (804)468-9166

DECEMBER 4, 1994 (SUNDAY)

LANDOVER, MD - D.C.M. ARC (W5YI VEC) WALK-IN
CONTACT: FREDDIE BATTLE NG3G (202)546-9348 (DAY)
(301)773-2898 (EVENING)

DECEMBER 10, 1994 (SATURDAY)

DAVIDSONVILLE, MD - ANNE ARUNDEL RADIO CLUB (LAUREL VEC)
WALK-IN
CONTACT: NANCY ALLEY NT3Z (410)761-7115
BOB ISRAEL WC3I (301)262-5083

ALEXANDRIA, VA - MT. VERNON ARC (LAUREL VEC) WALK-IN
CONTACT: FRANK MACKEY N4GUS (703)455-1510

CUMBERLAND, MD - MOUNTAIN ARC (MOUNT. ARC VEC) WALK-IN
CONTACT: LEO PATTERSON KQ8E (304)289-3576
GAY REMBOLD W3DFW (301)724-0674

HARRISONBURG, VA - MASSANUTTEN ARA (ARRL VEC) WALK-IN
CONTACT: MARSHALL COOPER N4ZKH (703)856-8012 (6-9PM)

DECEMBER 15, 1994 (THURSDAY)

TOWSON, MD - BALTIMORE ARC (ARRL VEC) WALK-IN
CONTACT: BOB KENNICK WB3HNV (410)426-8255 MAILBOX #3468

SCHEDULE OF EXAMINATIONS - 1995

January 7, 1995 (Saturday)

Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC)
Walk-In
Contact: Nancy Alley NT3Z (410)761-7115
Bob Israel WC3I (301)262-5083

January 8, 1995 (Sunday)

Landover, MD - D.C.M. ARC (ARRL VEC) Walk-In
Contact: Freddie Battle NG3G (202)546-9348 (Day)
(301)773-2898 (Evening)

January 14, 1995 (Saturday)

Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In
Contact: Frank Mackey N4GUS (703)455-1510

January 21, 1995 (Saturday)

Laurel, MD - Laurel ARC (Laurel VEC)
Pre-Registration Desirable, Limited Walk-In
Contact: John Creel WB3GXW (301)572-5124 after 6 PM

January 24, 1995 (Tuesday)

Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC)
Pre-Registration Requested, Walk-In limited
Contact: Jerry Gavin NU3D (410)761-1423

January 27, 1995 (Friday)

The Pentagon, Arlington, VA - Pentagon ARC (ARRL VEC)
Pre-Registration Encouraged
Contact: Jim Fox KE4EID (703)756-8994 (Work)
(703)931-6523 (Evening)

continued on next page

January 28, 1995 (Saturday)

Washington, DC - GWU/DOS ARC (ARRL VEC) Walk-In
Contact: Hani Raad AA3EI (202)223-3925

February 5, 1995 (Sunday)

Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In
Contact: Freddie Battle NG3G (202)546-9348 (Day)
(301)773-2898 (Evening)

February 11, 1995 (Saturday)

Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In
Contact: Frank Mackey N4GUS (703)455-1510

February 16, 1995 (Thursday)

Towson, MD - Baltimore ARC (ARRL VEC) Walk-In
Contact: Bob Kennick WB3HNV (410)426-8255 Mailbox #3468

February 18, 1995 (Saturday)

Laurel, MD - Laurel ARC (Laurel VEC)
Pre-Registration Desirable, Limited Walk-In
Contact: John Creel WB3GXW (301)572-5124 after 6 PM

February 28, 1995 (Tuesday)

Annapolis, MD - Maryland Mobileers ARC (Laurel VEC)
Pre-Registration Requested, Walk-In limited
Contact: Lois Turner KA3VVQ (410)647-4178

March 5, 1995 (Sunday)

Landover, MD - D.C.M. ARC (ARRL VEC) Walk-In
Contact: Freddie Battle NG3G (202)546-9348 (Day)
(301)773-2898 (Evening)

March 11, 1995 (Saturday)

Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In
Contact: Frank Mackey N4GUS (703)455-1510

March 18, 1995 (Saturday)

Laurel, MD - Laurel ARC (Laurel VEC)
Pre-Registration Desirable, Limited Walk-In
Contact: John Creel WB3GXW (301)572-5124 after 6 PM

March 24, 1995 (Friday)

The Pentagon, Arlington, VA - Pentagon ARC (ARRL VEC)

Pre-Registration Encouraged

Contact: Jim Fox KE4EID (703)756-8994 (Work)
(703)931-6523 (Evening)

March 28, 1995 (Tuesday)

Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC)

Pre-Registration Requested, Walk-In limited

Contact: Jerry Gavin NU3D (410)761-1423

EXAM FEES:

- * Check for appropriate exam fee. Fees and modes of payment for individual VECs and exam teams may vary.
 - * ARRL VEC exams cost \$5.75
 - * Laurel VEC exams are free
 - * Mountain VEC exams are free
 - * W5YI VEC exams cost \$5.75

BRING TO EXAM:

- * Picture identification
- * Completed FCC form 610 (most VE teams will supply at exam)
 - * Original and a copy of current FCC amateur radio license
 - * Originals and copies of all active certificates of successful completion of prior exams
 - * Exam fee (check or cash depending on VE team)

"GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

* If you presently hold a Technician class license which was first issued prior to March 21, 1987, you may be grandfathered for Element 3B (General class written exam) by presenting the original and a copy of the license dated prior to March 21, 1987 to the VE team. It is your responsibility to prove that you are entitled to grandfathering. Do not lose your original license!

RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. All submissions must be in writing
2. Date and day of week must be specified for each exam date
3. Point of contact and phone number must be specified
4. Sponsor and location must be specified
5. VEC must be specified
6. Exam dates up to 12 months in advance will be accepted
7. Deadline for submission is 25th of the 2nd month prior to publication date (e.g., Sept. 25 for November issue)

The Mid-Atlantic DX and Repeater Association

- ✦ Meetings: By published schedule, generally the second Thursday of each month. Meeting locations rotate among places in Maryland, Pennsylvania, Virginia and West Virginia.
- ✦ On The Air: 1930 Tuesdays on 147.66/06
- ✦ Address: 230 North Potomac Street, Suite 2A, Hagerstown MD 21740
- ✦ Information: Call our Voice BBS: 301-416-8447, select Box 101 and leave your message requesting club info.

November saw the start of a new membership drive for MADRA. Erick, KE3PB (former N3JAI), has taken on the duty of making membership cards and sending out renewal notices. Sam, N3MPE, has volunteered to be our new Membership Chairman, so the goal of 200 members by 1995 is surely in sight.

You've all heard of T.O.M. (H. P. Maxim), whose 125th was celebrated by many clubs in September. We have our G.O.M. (Grand Old Man), Jim, KA3SDM, our mentor and trustee of the 147.06 repeater. Jim is home from another bout with the hospital. We don't get him on the air much, but he's glad to get cards and visitors, just call to make a date or mail to his CallBook address.

Russ, N3KKW, a MD State Police officer, was in a scrape (literally) when a suspect resisted arrest by trying to run him over. He was dragged 100 feet but made the pinch and is on the job, cruiser mobile.

Not a man to be trifled with!

November's VE Test Session was scheduled, as usual, for the third Saturday (11/19) at Smithsburg, MD. If you are interested in any of these sessions, call the voice BBS at 301-416-8447 and select box 110 for info or register by leaving a message at box 112.

Erick, KE3PB, our tech-talk speaker for the November meeting, prepared a presentation, with pro-quality slide show, covering current and future (post-Pentium) computer processor chip technology.

Jim, WA3FUJ, is spearheading our effort to get Ham radio in the schools in our servicing area. Frederick County will probably be first since Jim already has a proposal under consideration there. Any

donations of junk we can rehab for this program will be appreciated.

Computers, rigs, accessories, coax, whatever - all support is welcome.

Repeater news is moving on many fronts. The 147.06 machine should have new jumpers, a second antenna and PL working by the time you read this. The PL decoder and encoder should be at 118.8 Hz. The 448.125 system was scheduled for reactivation in November, as was the 220 and packet node. As this was written, the 220 frequency was not available, but it should be part of our column masthead in next month's issue. For our friends in WV, the 147.345(+) system is coming together (again) near Martinsburg, hopefully with a relocation of the antenna to its former high point for good coverage. Mike, WB8VBW, keeps on making progress toward a multi-access PACTOR node (HF, 220 & 440) but we are still being delayed by the problem of getting power.

Don't forget that all are welcome at our monthly meetings, normally on the second Thursday. Since we rotate the locations, call the voice BBS or contact N3HYM, WB8VBW or N3MPE on packet to get info on the next location and tech-talk program. You can also check in on the Tuesday night net to get the latest plans for meetings and other events.

73 DE N2CSQ/3

A CHRISTMAS REMINDER "SANTA NET"

The Shenandoah Valley Amateur Radio Club will sponsor and operate the 1994 edition of the "SANTA NET" from the KK3L 2 Mtr. repeater in Berkley Springs, WV on December 24th, 1994. Beginning at 1300 Hrs. local time. The operation will be on:

146.745 Mhz. - West Virginia	443.950 Mhz. - Maryland
147.300 Mhz. - Virginia	443.925 Mhz. - Pennsylvania
146.270 Mhz. - Pennsylvania	
146.970 Mhz. - "	"
146.835 Mhz. - "	"
147.370 Mhz. - "	"
145.110 Mhz. - Maryland	

Children who check into the NET can obtain a personalized "SANTA" certificate by sending a SASE to:

The Shenandoah Valley Amateur Radio Club
P.O. Box 139
Winchester, VA 22604
For More Information Contact: N8ODZ, Mary Ann Foble

National Capitol DX Association

- ✔ Meetings: Feb, Apr, Jun, Oct and Dec at a member's home. Contact the secretary (Rick Murphy, WAISPT) for details.
- ✔ On-The-Air: Every Sunday at 8:30 PM on the 147.000 repeater. All are welcome!
- ✔ Information: Rick Murphy-WAISPT (703) 280-2637. Leo Boberschmidt
- ✔ XA3TSY (301) 946-3738. Brian Bayus-NIKCE (703) 264-1180 or NLKCE on the Local DX Cluster or NIKCE@KF4TE.VA.USA.NA.

OCTOBER MEETING: Our October meeting was held in Sterling Park, VA at the home of Steve-KOOU and Kristen Harrison. At the meeting the following were elected the officers of NCDXA for the coming year: President-NIKCE, Brian Bayus; Vice President-WV3B, Jeff Strandburg; Treasurer-W3UJ, Henry Herman and Secretary-WAISPT, Rick Murphy. Congratulations to all and thanks for your support.

KUDOS: Our sincere thanks to our retiring President, Leo Boberschmidt-NA3TGY for two years of outstanding service. I am pleased to report that Leo has graciously agreed to continue to run the Sunday night meetings on the air. We are all pleased that he will still be heard as the "Voice of NCDXA".

DUES: For those who have forgotten, annual dues are now past due. Please send your dues payment to our Treasurer, Henry Herman-W3UJ as soon as possible.

DECEMBER MEETING: The December meeting (our Holiday Get-Together) will be held on December 17th at the QTH of Paul-KK4HD and Noelle Van Der Eijk in Annandale, VA. We hope that as many as possible will attend and enjoy the Van Der Eijks hospitality. Directions will be included in the forthcoming Meeting Notice and also posted on the Packet Cluster. Those who are not members and would like to attend, please contact me for further information.

For now, 73 and Good DX
NIKCE, Brian Bayus, President

Quarter Century Wireless Association SOCIETY OF WIRELESS PIONEERS

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12:00 Noon Saturday DECEMBER 17, 1994

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Reservations: Send check for \$25 per person, payable to QCWA Chapter 91, To: Richard A. Stalls, K4KYO, 917 N. Lexington Street
Arlington, VA 22205-1320

Further information: Check into the QCWA 2-meter net, Sunday mornings,
NVFMA Repeater, 146.79 MHz, 0900 - 1030 EST

ATTENTION

EFFECTIVE JANUARY 1, 1995

The Deadline for Submissions to Auto-Call Magazine Will Be
The 1st of the Month Prior To The Month of Publication

NO EXCEPTIONS!

EFFECTIVE FEBRUARY 1, 1995

Submissions to Auto-Call Magazine Will only be Accepted VIA ELECTRONIC MEANS
(Excluding Shack Sales & Photographs)

i.e. IBM Format Disk (3.5 or 5.25), Modem - I will accept modem transfers only when prior arrangements are made. - Please call first. As soon as I can make arrangements with a local Landline BBS, you will be able to upload your columns at your convenience..... You will be notified in the January 1995 issue of Auto-Call of the BBS phone number and protocol for uploading your information.

When submitting your Club column for publication in Auto-Call Magazine, please limit your information to 1 full page. DO NOT place your text in columns.
Type your information flush left. I will format it when I lay-out the magazine.

CLUB HEADERS

Please DO NOT use all capital letters in your club name.

As you can see I have to edit many of them. Limit the information in your club header to the following information:

Meetings: List your meeting dates, Times & Locations.

Repeaters: Frequency & General Location

Nets: List your general information nets only

Mailing Address: Self-explanatory

Information: List a contact person for your club

Your header information does not need to include training dates & times or training contact persons, Club officers, Luncheon dates, Etc.

IF YOU HAVE ANY QUESTIONS, PLEASE FEEL FREE TO CALL ME AT
(410) 437-6258



MARYLAND MOBILEERS AMATEUR RADIO CLUB, INC.



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SUNDAY, JANUARY 29, 1995

8 A.M. 'TIL 2 P.M.

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Tom - KA3OMU at (410) 969-2639 (Evenings)

Or Mail A Donation Of \$7.00 (Covers Table And 1 Operator) Make Check Payable To:

M.M.A.R.C.

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FOR V.E. TESTING INFORMATION AND REGISTRATION CONTACT:

Jerry - NU3D at (410) 761-1423 (Anytime)

FROSTFEST '95

Winter Amateur Radio and Computer Show

SUNDAY, JANUARY 15, 1995

The Showplace, 3000 Mechanicsville Turnpike, Richmond, Virginia



Hours: 8:30 A.M.-3:30 P.M.

An ARRL Approved Event



Presented By The Richmond Amateur Telecommunications Society

GENERAL INFORMATION

DEADLINE FOR ALL RESERVED SPACES AND ADVANCE TICKET SALES IS DECEMBER 30, 1994. No space reservations or advance tickets after that date. Any unsold spaces will be available on the day of the show. All monies for advance tickets and reserved spaces must be received no later than January 2, 1995.

SAME LOCATION AS LAST YEAR. Building available for set-up from 12:00 p.m. until 8:00 p.m. on Saturday, January 14th, and from 6 a.m. till 8 a.m. on the day of the show. Drive-in for unloading available on Saturday only.

AMATEUR RADIO EXAMS GIVEN ON SATURDAY, JANUARY 14, AT 4:00 p.m. For more information or registration for exams, contact Dow Pierce, WA4HMX, at (804)232-8128.

FORUMS AND PRIZES! Various forums during the day. Hourly door prizes are drawn starting at 9 a.m. Major prizes drawn at 3:30 p.m.

FIRST-RATE TALK-IN SERVICE! Talk-in provided Sunday morning on the 146.88 and 145.43 repeaters.

TICKETS AND RESERVATIONS: Becky Holberg, (804)264-8218 evenings

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BUSINESS NAME or AMATEUR CALL SIGN _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

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\$35.00 EACH ADDITIONAL TABLE (Price includes admission, tables, and electrical power).....\$ _____

GENERAL (NON-COMMERCIAL) FLEA MARKET TABLES (8') @ \$15.00 EACH (MAX. OF 10).....\$ _____
(Non-Commercial Exhibitors must also purchase General Admission Tickets)

ELECTRICAL POWER FOR FLEA MARKET AREA @ \$5.00\$ _____
(Payment of one power fee covers all flea market tables for an exhibitor and includes access to one 120V outlet)

ADMISSION TICKETS @ \$5.00 EACH.....\$ _____

ENCLOSE SELF-ADDRESSED STAMPED ENVELOPE IF ONLY ORDERING ADMISSION TICKETS
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TOTAL: \$ _____

MAIL THIS FORM, WITH YOUR CHECK AND S.A.S.E., TO:
RICHMOND FROSTFEST, P.O. BOX 11403, RICHMOND, VA 23230

CUT-OFF FOR ADVANCE TICKETS AND RESERVATIONS IS DECEMBER 30, 1994

Anne Arundel Radio Club

- ✔ Meetings: 8 PM 1st and 3rd Thursdays, Davidsonville Family Recreation Center, Queen Anne Bridge & Wayson Roads off MD Rt. 214 near Annapolis.
- ✔ On The Air: 2030 Thursdays When there is no club meeting on 147.705/105. Tuesdays at 2030 local time on 28.410. Wednesdays at 2000 on 444.400. The Chesapeake Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. MSN (Maryland Slow Net) every evening at 1930 on 3.7170 Mhz.
- ✔ Address: P.O. Box 308, Davidsonville, MD 21035
- ✔ Information: Margaret (Holly) Bevan, 410-923-0229

At the October 20th Program Meeting Club Member Randy Dekrone/N3MNX discussed ARES (Amateur Radio Emergency Service) and RACES (Radio Amateur Civil Emergency Service). He explained the difference between the two services, the modes of communication used and the operating procedures. He invited anyone interested in emergency communications to attend the monthly exercises on the second Tuesday of each month at 7:30 PM in the Anne Arundel County office of Emergency Management. The December meeting would be a good time to attend because the Photo ID's will be processed.

October was an extremely busy month for AARC. On Sunday October 9th fifteen members provided communications for the Annapolis Striders Metric Marathon. Coordinator Barbara White/N30BU reported that everything went well and that the Annapolis Striders were genuinely grateful for their help.

On October 15th Will Dekrone/N3MNX coordinated the opening of the Ham Shack from 10 AM to 4 PM to local scout participants in the annual "Jamboree on the Air". Scout Pack 269 brought in approximately 30 scouts over the six-hour period. They were able to talk to scouts around the country. Pat Baird/N3MKP and Jerry Herman/N3BDW talked to them about Amateur Radio.

Many members of AARC spent the last weekend in October providing communications for Chesapeake Appreciation Days. In addition to the usual communication

December 1994

ications, ATV coverage of the skipjack races was provided by Bob Baltz/N3MNT so that attendees on shore could get a closer view of the races and of the skipjacks themselves. In the club tent, Buck Watson/KC3Y, manager of the MSN Slow Net, and Will DeKrone/N3MNX (at the packet station) sent about 220 messages over the National Traffic System from event attendees to family and friends across the country.

That same weekend of October 29th and 30th, was the CQ Magazine World-Wide DX (Phone) Contest. A team of five contest enthusiasts, led by Dan Weisenburger/KW4T, worked for several weekends getting new wire antennas up for the low bands and installing the club 40-meter 2-element band on the repeater tower. They named their endeavor, a program to get AARC more active in contesting, "Operation: Restore DX". In spite of terrible band conditions on Saturday, they managed a final score of 386 QSO's, 73 zones, 222 countries and 294,410 points.

We are sad to report that three more AARC members have become silent keys: Joe Evans/K3KJZ died on October 15th, following a lengthy illness. Howard Miller/KA3ERP died on October 13th. William (Bill) Richardson/W3IMG died in May. We regret that we did not learn sooner that he is a silent key.

At the October 8th testing session in the clubhouse, Oscar Ramsey/NV3G, Charlie Tiemeyer/W3RMD and Jeff Smith/N30KY gave 15 tests to 5 persons. Nine tests were passed with 4 upgrades. Other members of the team were Bob Israel/WC3I, Harlan Ray III/AA3FE, Robert Kammer/N3POX, Bettye Tiemeyer/K3VRZ and Holly Bevan/N3BMB. The next testing session at the clubhouse will be on December 10th.

Diane Frese has received the call N3TLU.

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Arlington Amateur Radio Club

- ☛ Meetings: Third Tuesday of each month at 7:30 PM
- ☛ Place: Red Cross Building, 4333 Arlington Blvd., Arlington, VA
- ☛ Net: Tuesdays (except third Tuesday), 7:30 PM, 145.47(-)
- ☛ Information: Mike Callahan, NW3V 241-5618 or @WA3TAI
- ☛ Mail: 4333 Arlington Blvd., Arlington, VA 22203

Last month we reported that club member Joe Shepherd, AB4RA, was getting married this month. This month we can report Joe surprised us and got married way back "in October. In any case, congratulations to Joe and his new wife, who turns out to be his old wife. Confused? Look for AB4RA on the weekly net and get it straight from him.

Way back on Columbus Day, an antenna party made up of Dennis, Mike, Joe, Marc, and Tom repaired the club's 10/15/20 meter beam. What should have been a simple job turned out to be rather trying when, for starters, we couldn't locate the "it has to be here somewhere" replacement balun. Perseverance paid off though and the beam is working just fine.

There was little for official business at the October meeting but plenty of news and some goodies. Mike, NW3V, reported on a visit to his son's 1st grade class. He gave a half-hour amateur radio demonstration including across-the-room QSO's and a graphic representation of the electromagnetic spectrum. His visit was well received and Mike has colorful documentation to prove it.

Dennis had a couple of things. First, he is trying to get rid of the contents of eight boxes of ham radio equipment, parts, and junk formerly belonging to Herb, W4GBG, who is moving to Danville, VA. Second, Dennis agreed to help arrange an antenna party for Larry, K6HWT, who is blind. For more information, tune into the Tuesday net or call Dennis at 703-243-3743.

The goodies were brought in by Craig, N4EFJ, and were of the conducting type. There were several boxes worth of items from the shack and junk box of silent key Leo Gorzkowski, W4LG. Craig is helping Leo's wife Rose, KB4ZQK, get rid of the stuff.

To wrap it up, Marc, KS4CU, showed off his homebrew small loop antenna. The small loop, as described in the ARRL Antenna Book and earlier this year in QST, is an efficient portable, multiband, HF antenna. The key is to eliminate zealously any unnecessary losses. As an accompaniment Mike demonstrated how to model the antenna using the MININEC computer program.

Coming up at the December meeting are the officer elections, the Christmas mystery gift exchange and goodies of the edible kind. We'd love to work you in person.

73, Marc, KS4CU



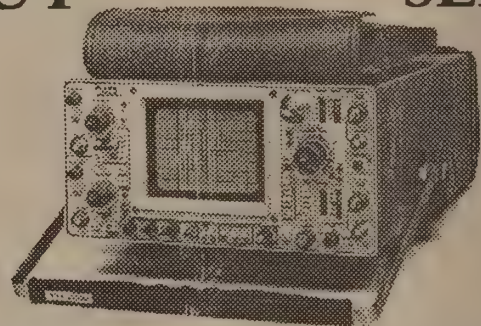
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Baltimore Amateur Radio Club

- ✦ Meetings: Twice monthly, 7:30 pm at Dulaney High School (Padonia Road, Timonium MD) -First Wednesday of the month: business meeting Third Wednesday of the month: programming
- ✦ Repeaters: W3FT/RPTR 146.67(-)/224.24(-) (no PL) and 449.625(-) (PL 107.2) Note: two meter/220 Mhz are linked.
- ✦ Club Net: Every Tuesday night at 8:30 pm on 146.67/224.24
- ✦ Club BBS: (410) 665-7646 (minimum 2400 baud)
- ✦ Club Voice Mail/Information: (410) HAM-TALK
- ✦ Greater Baltimore Hamboree & Computerfest/ Maryland State ARRL Convention Information: (410) HAM-FEST or (800) HAM-FEST
- ✦ Mailing: BARC, Inc.; P.O. BOX 120; Reisterstown MD 21136

October's program meeting had a nautical theme, with Don/W3QYL talking about the S.S. John Brown. Don brought photographs and diagrams of the ship, as well as an enlarged copy of the QSL card sent to confirm contacts with the shipboard ham shack. We gained a new appreciation for the rigors of life aboard a WWII Liberty Ship. The ship is constructed to a design which dates back to the late 1800's. The design was selected for its durability and the ease with which it can be rebuilt even while en route, and in places the (very) thick steel bulkheads were reinforced by concrete in order to enhance the ability of the ship to survive under fire. Which, of course, makes life more interesting for those involved in restoring the ship. (Rumor has it, for example, that many drill bits and a few good volunteers were "burned out" by the effort to create a new antenna feed line conduit through the wall of the radio room.) The Saturday morning after the program meeting was a beautiful fall day, providing a pleasant backdrop for the follow-up tour of the ship.

December's program meeting has been moved to the 7th so as not to conflict with the holiday season. Mr. Robert Damrau, Operation Manager for the Link Plus Corporation will demonstrate an audio Compander. The Compander compresses data (such as audio amplitude) for transmission, and expands the data again upon reception. The device is said to produce dramatic improvements in transmissions under conditions of severe interference.

December 1994

The Free State team, N3DCI and WA3TID (Bill and Craig) again came in first in the October fox hunt, finding the hidden transmitter within 30 minutes, and with only 5 miles on the odometer from the start of the hunt at Savage Park to the fox. The second team in was N6QAB and N7CUE; followed by N3DQU; and then WA3ZER, N3QQC, and N3IVO. Robbie/WG3R, the fox, was sitting in his car on top of a parking deck at the Laurel Mall, within easy reach of a number of restaurants, to which the group retired after the hunt for refreshments and tales. Check the club voice mail, or the club net, for current information on the next fox hunt.

... 73 de N3IVO/Rosie

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NEW DEADLINE

Effective January 1, 1995
the deadline for submissions
to Auto-Call Magazine is
The 1st of the Month prior to the
Month of publication....

NO EXCEPTIONS!

Columbia Amateur Radio Association (CARA)

- ✦ Club meeting: 4th Tuesday of the month at 7:30 p.m., at the county's Howard Building on Court House Drive in Ellicott City.
- ✦ Net: 147.135 repeater at 8:30 p.m. each Tuesday except for meeting nights. Youth net: 147.135 repeater at 7:30 p.m. every Thursday.
- ✦ Repeaters: 147.735/147.135 (cross-linked to 222.32/223.92); 147.990/147.390 (direct dial 911); 222.32/223.92 (cross-linked to 147.735/147.135); and 443.275/448.275.
- ✦ CARA breakfast: 9:30 a.m. on the 2nd Saturday of each month. Contact Dionne Frank-KA3ZDL, (410)531-2933.
- ✦ Fox hunts: Bill Nesbitt-N3OKI, (410)997-6062.
- ✦ Information: Bob Scarburgh, Pres - KC3EV, (410)465-2421.

The club has done quite well in contests this year. First we learned that we came in first in the Maryland QSO Party. Next, according to the Field Day results in the November issue of QST, CARA placed 4th in the nation in its club category and 1st in our section. A lot of credit goes to the enthusiastic participation of our young hams.

The tech committee has installed new RC-96 controllers at the 147.35 and 147.390 repeater sites. These controllers are state of the art with many features to enhance the operation of the repeaters.

Plans are underway for our annual Winter Banquet at the Clarksville Volunteer Fire Department on Sat., Jan. 21, 1995. It is the biggest social event of the year for the club and includes the installation of the new officers elected in November.

73's, Jean Williams-KB3AOT

SEND YOUR ARTICLES TO:

Doug Allen, Editor
Auto-Call Magazine
8008 shadow Oak Lane
Pasadena, Md 21122

Fauquier Amateur Radio Association

- ✦ Meeting: 7:30 pm, Second Tuesday of the month except July, August & December. Shadow Lawn Recreation Center, Warrenton VA. Next event: Party — December 10 at United Methodist Church, Marshall, VA.
- ✦ Breakfast: Last Saturday of the month at Big Boy (next to HoJo's) Warrenton 7:30-9:00 am
- ✦ Net: Every Wednesday, 9:00 pm, 147.165 MHz Rptr
- ✦ Packet: FARA7 node 145.070 MHz with direct connect to FBBS9 Bulletin Board 145.090 MHz.
- ✦ Repeater: NZ4N/R 147.165 MHz (+0.600 MHz)
- ✦ Newsletter: Toroid, Monthly. (A complimentary issue is usually available from Warrenton Radio Shack.)
- ✦ Information: Neil, AB4YK, (703) 364 3861

The October meeting presentation on "The Many Facets of Grounding" was enjoyed by a good group of FARA hams. Larry, K4LLQ, FARA VP, described the basics of lightning phenomena, grounding and survival. The techniques recommended are well known but not widely practiced. Larry's presentation included dozens of overhead transparencies that laid out the basic facts about lightning and its effects. Using specially created text slides, standard ARRL Handbook illustrations and commercial literature, Larry developed an appropriate plan for a well-conceived system. You had to be there to appreciate it.

We gladly welcomed John McKusker, KE4QNM, as a new member. We were able to present him with the new member package. The first new member to receive it on the occasion of acceptance into the club. (Thanks to Chuck N4YXW who sacrificed his copy.) The new member package is proving popular so we will have to get more available for the next meeting.

The following were nominated for elected office for 1995's FARA executive Board: Don Maziarz, WY2V, for President; Mark Lindsey, KD6AKC, for Vice President; Woodie Woodward, KC6NOT, for Secretary; George Murphy, WD4KOJ; Jim King, K8SLC, for Activities Chairman.

FAR members are welcome to join us at club meetings. We are partying this December (see header). The next regular meeting is — 7:30 pm, January 10, at Shadow Lawn Recreation Center in Warrenton.

Neil, AB4YK.

Green Mountain Repeater Association

- ✔ Meetings: Board of Directors, Last Monday of each Month
- ✔ Repeaters: KD3VR - 146.61 (Cheverly) K3GXF - 146.88 (Greenbelt)
- ✔ Luncheon: First Saturday of each Month at the Fountain Cafe in the Laurel Shopping Center Mall, U.S. Rt. 1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30 A.M.
- ✔ Mailing: GMRA, P.O. Box 429, Riverdale, MD 20737
- ✔ Information: Boyd Nelson - KZ3Z (301) 434-0934

GMRA held it's luncheon get-together on Saturday, October 1, 1994 at the Shoney's restaurant in the Laurel Lakes Shopping Center on Rt. 1 Baltimore Ave. The attendance was not as large as those preceding this one. Next lunch social will be in the regular Shopping Mall. Let's strive for a better turnout.

Paul Freirich - W3HFA, 1st. V.P. of GMRA welcomed everyone due to the absence of Joe Nunemaker - KD3VR. Paul's lovely wife Phyllis - N3JJA accompanied him. Paul gave everyone an update on the latest inner workings of GMRA. Phyllis wears the most unique and sexy earrings that she makes as a hobby. I do believe Paul is designing miniature transceivers to install in them, Hi.

As of this writing I haven't been able to acquire the latest outcome of the Board of Directors meeting. However, we feel that they are acting in everyone's best interest. Just like our elected officials in Congress. What did I say? Bite your tongue old man. Just a little levity on the home front. Hi-Hi.

The two repeaters seem to have been working quite well of late. No complaints from this QTH. Thanks to those volunteers who have done tune-ups and installed low loss hardline hookup cables between components of the repeater units.

GMRA is always looking for new members. So let's all do our duty and recruit a few. Dues are payable beginning December 1, 1994. The dues are still \$15.00 per year which also entitles you to auto-patch capabilities on 146.61.

Let me extend Holiday Greetings to all Amateur Radio and beyond.

de Ken Easton, N3HLY

Prince George's Wireless Association

- ✔ Meetings: First Working Tuesday of each Month, 7:30 P.M.; American Red Cross bldg.; 6206 Belcrest Rd. Hyattsville, MD 20782
- ✔ Club Station: K3CEZ
- ✔ Mailing: 4109 Kennedy St., Hyattsville, MD 20781
- ✔ Information: Frank Holton - WA3ZMW (301) 927-1245

PGWA held it's monthly meeting on Tuesday, October 4, 1994. The meeting was brought to order at 7:45 P.M. by the President - WA3ZMW. Minutes of the previous meeting were read and accepted. The Treasurer's report was given. A moment of silence was observed for our past members and secretary, Hersh Dan Miller, W3SWD who became a Silent Key on September 6, 1994.

Announcements and incoming correspondence was read by Frank and old and new business was discussed. A general discussion ensued including the upcoming Simulated Emergency Test (SET) which was held on October 15, 1994.

PGWA set up three different stations for the SET on Saturday, Oct. 15. WB3KXL, Dave Black ran the Packet Station, Frank, WA3ZMW ran the HF rig and passed messages on the Maryland Emergency Phone Net. Dave was linked up with EOC and Charles, KA3COT received and passed messages on 2 meter repeater operation.

Kathy, N3QPO, Red Cross Disaster Control Chairperson and PGWA member had planned messages sent from Red Cross Chapter Headquarters to and from an in-house shelter site by Joe, KA3ZKA and Ken, N3HLY.

Kathy sent Joe out to pick up lunch for the whole crew and after lunch Kathy held a critique which everyone agreed went quite well and was a real learning experience for all concerned.

73's and Happy Holidays to all
Ken Easton, N3HLY

Laurel Amateur Radio Club

A Volunteer Examiner Coordinator

- ✔ Meetings: 4th Wednesday of each month (except November & December) 7:30pm at 384 Main Street, Laurel, Nd; Social: 2nd Wednesday of each month, except December (Call for directions)
- ✔ Rets: 1st & 3rd & 5th Wednesdays, 3:30 p.m., an 147.225(+600), no tone
- ✔ Mail: P.O. Box 3039, Laurel, MD 20709-0039
- ✔ Exams: 3rd Saturday of each month, 10:00am at Maryland Radio Center
- ✔ Information: Jim/WI3N (301)725-6829 or Pud/W3DQI (301) 498-6293

CONGRATULATIONS.... AND CONGRATULATIONS

Congratulations to LARC member Mike/WB3HUP for his overall second place in the recent MD QSO Party. Mike was second overall with 29,600 points, but first in the individual category. The GARA club finished first overall.

Congratulations also to Joe/NA3T who made a successful moonbounce on 432 MHz on 30 Oct, while operating from the QTH of Mike/NV3Z. Joe has been working a long time on his ERE efforts and will also be attempting a 2 meter moonbounce soon.

And finally...congratulations to Mardee/N3REQ and Joe/NA3T who are expecting a baby in March. Joe and Mardee are bouncing off the moon with joy!

AROUND THE BAND....

The Laurel ARC was active during October with a number of the VE team members supporting the test session at the CARA Hamfest on 16 October and conducting the regular monthly VE session at the MD Radio Center on 15 October. John/WB3GXW expresses his thanks for the continuing support of all the VE team members.

Several members, led by Charles/KD3ZS and Mike/WB3HUP, participated in the Boy Scout JOTA event on 15 October by operating from the Cedarville State Forest Park. Over 150 scouts had the opportunity to experience the fun of Amateur Radio.

At the regular club meeting we all enjoyed a video provided by Russ/N3AUQ, about DX contesting. Plans were also made to set up a station to participate in the ARRL November Sweepstakes.

The Laurel ARC annual Holiday Banquet will be held on 11 December at Oliver's in Laurel. Call Pud/W3DQI for information and reservations.

73 de Roger/N3NLI

M A D R A S

The Maryland Apple Dumpling
Radio Amateur Society, Inc.

- ✔ Meetings: 2nd and 4th Thursdays - 7:00 P.M. NBC Building - WKYS Conference Room 4001 Nebraska Avenue Washington, DC 20016
- ✔ Nets: 1st and 3rd Thursdays at 8:30 P.M. on 145.45 MHz
- ✔ Repeaters: 444.100/449.100 MHz 145.45/144.85 MHz
- ✔ BBS: 145.030 MHz. Call Sign: N3GKZ Alias: MADBBS-(This is a closed BBS Station)
- ✔ Mailing: P.O. Box 2468 - Wheaton, Maryland 20902
- ✔ Information: Hani Read - AA3EI (202) 223-3925, Lazzy Ziecheck - N3GKZ. (301) 984-6112, Jean Blacik - N3PLC (301) 984-6112

Many thanks to our members who attended our meetings in October. We had two excellent speakers: Pud Reaver - W3DQI; spoke on "National Traffic Systems" on October 13th and Steve Ickes - WB3HUZ gave a talk on "AM Systems" at our October 27th meeting. The meetings were well attended and the speakers were excellent. NADRAS wants to thank you both for your interesting and informative talks.

Elections were held in October and the following members were elected as officers for the year 1994 to 1995:

PRESIDENT: Larzy Ziecheck, N3GKZ
VICE-PRESIDENT: Hani Read, AA3EI
SECRETARY: Jean Blacik, N3PLC
TREASURER: Scott Johnston, KD4EBL
PARLIAMENTARIAN: Jim Hobbs, AA3DN
MEMBER-AT-LARGE: Larry Wolken, N30JD

Continued on next page

Maryland Emergency Phone Net

- ▶ Meetings: Nightly, 1800 Local, 3920 KHZ
- ▶ Directors: WAlQAA, W3DQL K30NU, NF3X (Alternate)
- ▶ Manager: K3ORW; Secretary: WA3YLO; Treasurer: KC3ZJ
- ▶ FAR Representatives: KC3ZJ, WA3FYZ

Thanks to Mike Carr/WAlQAA, for the following report on the Simulated Emergency Test (SET), held on Saturday, October 15, throughout Maryland and the rest of the country:

"The MEPN joined the section level NTS nets (MDD and MSN) in support of the SET by conducting special sessions which operated continuously between 1000 and 1700 local. Under organizational leadership of net manager K3ORW/Jim Sell, MEPN members served as liaison stations between MEPN and MDD, MSN, packet, the central region net on 147.105, and the western region net on 147.050, in addition to providing the customary NCS functions.

"The scenario this year involved airport disasters throughout the section. ARES provided communications for the disaster site with special communications and operations teams (SCOTS), the American Red Cross (ARC), shelters, hospitals, and other served agencies with communications to the rest of the section throughout the MDC Emergency Response Plan. Health and Welfare-Local (HWLOC) stations were extensively involved ... these are local stations within each county which provide direct paths for emergency, administrative, served agency and welfare traffic directly from their county to section-wide nets and the packet system.

"It is noted that support of the SET'94 operation enabled the MEPN to fulfill two of its organizational responsibilities simultaneously: its NTS function, and its Emergency Operations function as described in the Emergency Operations Plan. During this operation, section leadership observed the ease with which all participating stations grasped the role which was required to support communications for ARC, the primary served agency participating in this operation section-wide. It was heartening to see newcomers and old timers alike perform in these roles. Near the close of the SET exercise Mr. Michael Ritter, Director of

December 1994

Disaster Services for the ARC, Central Maryland Chapter in Baltimore, passed his message of thanks to NTS, ARES, and RACES members, section-wide, for the speed and accuracy of the communications service provided to his agency by our Field Service Organizations."

Mike concludes with "Good job, team! and thanks for a very successful activation of the full MDC emergency response plan. Are you familiar with traffic handling procedure and the Emergency Response Plan? If you are interested in teaming more about service to the public contact your local emergency coordinator, RACES officer, or any NTS met manager." (ed note: this information is usually available elsewhere in AUTOCALL)

Tnx, Mike, for the input. DX, holidays, and crisp clear weather are here. Have a happy, and hope to see you-all "on the air....."

73, PUD/W3DQI

Chapter X



Society



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For Information Call
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MADRAS - Continued from page 34

Our REPEATER CHAIR is Arley Wright, WB9GPO and our NET CONTROL is Quin Marsh, N3KGM. CONGRATULATIONS

We are looking forward to seeing all of you at our Christmas Party Dinner this month.

MERRY CHRISTMAS AND HAPPY NEW YEAR

73's, Jean - N3PLC

Montgomery Amateur Radio Club

- ☛ Meetings: 1st and 3rd Wednesdays of each month at 7:30 p.m., Executive Office Building, Montgomery County Government Center, 101 Monroe Street, Rockville, MD. Park in underground lot G-2.
- ☛ Repeater: 146.955 (-600) Rockville
- ☛ Club Net: 2nd 4th and 5th Wednesdays of each month at 7 p.m. on the MARC repeater and 7:30 p.m. on 28.450 MHz.
- ☛ Mail: MARC, P.O. Box 611, Gaithersburg, MD 20884-0611
- ☛ Information: Jeff - KZ3F (301) 258-0112
- ☛ Training: Ms. Rocky Jones (301) 216-5210

MONTGOMERY AMATEURS WORK FOR NOISE REDUCTION, PLAN FOR ELECTIONS by Nolan Crabb, AA3GO

Great as the information super highway might be, it's not without its share of traffic jams for members of the Montgomery Amateur Radio Club. Those traffic jams often come in the form of intermod which can obliterate whole QSO's without warning for those with radios whose front end is the least bit open and who are trying to work the 146.955 machine. Recognizing as they do that paging and other communications systems are here to stay, MARC members decided to fight the intermod by building small, very effective two-meter filters. The projects began in late August and continued through the September meetings.

MARC President Al Rabassa, NW2M, spearheaded the project, doing much of the leg work necessary to find the parts that would be needed at a reasonable price. As a result of Rabassa's detective work and sheer perseverance, MARC members built their two-meter filters for \$11 per unit.

"Certainly Montgomery County isn't the only area of the country where the kind of interference these filters help eliminate occurs," Rabassa says. "These little filters will be of real value to our members wherever they travel." The two-meter filter project was one of the most popular suggestions which had been included in a survey of the club which Rabassa had taken earlier in the year. "I think these projects bring us together," He says. "Almost a year ago now, we built dummy loads. Both these projects have allowed club

members to mingle, work together, and own inexpensive but effective tools that enhance their abilities as hams."

MARC members spent the October 19 meeting listening to speeches from candidates who wish to hold offices during 1995. The media's cameras weren't there, but then neither was the negativity and cynicism that seemed to characterize last month's general elections. As you might expect, MARC members were downright civil in their speeches. Only one candidate, Stan Staten, W3INK, had any opposition, and that coming from Mark Bary, N4EOC.

"If people want to vote for me," Staten said, "consider that a commitment to do something with or for the club. It's a commitment on your part to do more than come to meetings and absorb; you need to put something back into the club."

Bary, who had been nominated by Staten, said he was running so Staten could have a break from some of his responsibilities. The candidate who doesn't win the vice presidency will likely win a board position. "The other reason I'm running," Bary says, "is to serve the club. I've gotten a lot of pleasure from being a member of the club. A lot of folks have given me a lot of help, and I'd like to try to return some of that."

John Uhrlaub, KA3QFL, is seeking another term as MARC's treasurer, a position he says he's held for many years. "I can balance a check book," he quips, "and I am interested in serving the club."

Nolan Crabb, who seeks a second year as MARC's secretary, says membership in the club has resulted in new friendships and new opportunities to participate in the hobby that wouldn't have existed otherwise. "Let me give you an excellent reason to re-elect me," Crabb, who is totally blind, explains. "You see, the records for 1994 are currently available only in braille, and that could make life real tough for someone else coming in." At that point, someone in the audience was heard to remark, "there's nothing like job security, and that's sure one way to obtain it." He assured his audience that the records are in fact available in print, but asked for their vote nonetheless.

Continued on next page

Metropolitan Communications Network Radio Club, Inc.

- ☛ Meetings: Quarterly, the second Sunday of the month. Next meeting Sunday December 11, 1994 at the home QTH of WA3GGO, Bob Sporn.
- ☛ Repeater: N3AGB, 52.250 MHZ in, 53.250 MHZ out; Accessible on 147.36 MHZ and 444.35
- ☛ On the Air: Saturdays at 20:00 hours local time
- ☛ Mailing: Mary A. Milligan, KAIKWP, 6608 N. 18th St. Arlington, VA. 22205
- ☛ Information: Mary A. Milligan (703) 533-0650

The fourth Quarterly meeting will be held, Sunday, December 11, 1994 at the QTH of Bob Sporn, WA3GGO at 14:00 hours. In addition to the various committee reports, there will be the election of officers for the year 1995.

In September, Stanley Brigham, W3TFA, had a QSO with Al Brogdon, K3KMO, the managing editor of IIQST", while Al was on his motorcycle. Bob Curry, KC4VO are you listening? With a confirmation received from the Vatican, Stan W3TFA now has 205 countries confirmed. Bob Cannon, W3AGO renewed his Ham license, which will be valid into the year 2004!

FM NET SATURDAY AT 20:00 HOURS ON THE REPEATER.

New check-ins are always welcomed. George, KR4MU of checked into the net in October for his first Six-meter QSO.

THE SUNDAY MORNING COFFEE NET (50.4 MHZ) AT 09:00 HOURS.

W. Joe Saunders, Jr. K3UAL has computerized his QSO's. Upon doing so, he found that he had worked Stan Brigham, W3TFA as far back as April 1962. Frances Milligan, KD4AXW, harmonic of Bob Milligan, KI4MB and Mary, KALKWP celebrated her 13th birthday in October and has been a HAM four years. Congratulations, Frances.

CHRISTMAS NET

The Christmas net will be held at 10:00 Hours on December 25th.

New check-ins are welcome to come in. We would like to have more of a regular consistency.

73, KA3KWP

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MARC - Continued from page 36

Those seeking positions on the MARC board included Harry Ricker, KC3MX, Jeff Horlick, KZ3F, Ron Rubin, N3KQY, Don Smith, N3LHZ, and either Marc Bary, N4EOC, or Stan Staten, W3INK, depending on how the officers election turns out.

Ron Rubin, N3KQY, expressed his pleasure in serving on the board at present. "In the past year," he said, "we've done a lot of innovative things. But the job's not done just yet. I'd like another year on the board to finish up some of these projects."

Board Candidate Harry Ricker, KC3MX, said MARC was the biggest club to which he's belonged. "I operate almost exclusively on CW," he explained. "I want to encourage that kind of operation within the club." Ricker said he wants to raise the club's awareness level on QRP operation.

Auto-Call

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Mount Vernon Amateur Radio Club

- ✔ Meetings: Second Thursday of each month, 7:30 p.m. (except December) Mt. Vernon Governmental Center 2511 Parker's Lane, Alexandria, VA 22308
- ✔ Repeater: WD4PDP/R 146.055 input 146.655 output
- ✔ Nets: Every Tuesday at 9:00 p.m. Starts on 2-meter then moves to 10-meter on 28.408
- ✔ Information: John KI4HK, (703) 780-2882 or Julie KD4WSZ, (703) 799-9466
- ✔ Training Classes: John Forrest WZ4A, (703) 971-3905
- ✔ Testing: Second Saturday of each month, 9:00 a.m. Robert E. Lee RECenter in Lee District Park 6601 Telegraph Rd., Alexandria, VA 22310
- ✔ Mailing Address: Mt. Vernon Amateur Radio Club (MVARC) c/o Joe Salemi KR4CZ, P.O. BOX 7234, Alexandria, VA 22307

Slow Scan TV was the program at the MVARC October meeting. Offered by Keith KO4IO and Luke KO4IQ, a rapt audience was given a live performance of tv scans with use of the computer. My goodness, what will us "techos" think of next?

Many guests came to visit in October: Diane Ward, Ray Bayer N4XBH, Jan Rutledge N3KZM, Tom Hennig KE4POQ, Tamara Sasai KE4LWR, Jason Cole (son of Ray) and Matthew Wickliffe (son of Larry)

Classes: call John Forrest (703) 971-3905

Marine Corps Marathon was a wet event. Yet, the marchers and radio operators persevered.

November: Sweepstakes contest-contact Dan N4YKD (703) 354-1677.

December: MVARC Holiday Party, December 8, 1994. Be sure to sign up early. Call John Forrest for details (703) 971-3905

Public Service announcements on the 145.91 repeater, Wednesday evenings at 8:30 pm (2030 hrs).

MVARC attire is available. Forms can be procured from Steve WB4EEA, at the meetings or by phone (780-7248).

Testing: second Saturday of every month. Code and written, all levels. At Lee District Park in Alexandria. No charge and walk-ins are welcome. Call Frank N4GUS at (703) 455-1510 for information or if you are interested in being a VE or helping at the exams. You don't have to be a VE to help out. Please arrive between 9 & 10 a.m. for testing.

MVARC's HOLIDAY PARTY December 08, 1994; 1930hrs (7:30pm)

Julie, KD4WSZ

Northern Virginia FM Association

- ✔ Meetings: Fall, Winter, Spring
- ✔ Weekly Nets: NVFMA. Wed, 8PM, 146.79 ARES, Sun 9PM, 146.91. - Equipment Clinic 1st Wed of Month, 7:30PM, 146.79 Repeaters: 52.37/53.37, 146.19/146.79, 146.311/146.91, 222.60/224.10 XLink, 222.74/224.34, 449.75/444.75, 1272.1/1292.1
- ✔ Membership Info: Ann Herlich, KD4GSU (703) 481-1458
- ✔ Mailing Address: NVFMA, P.O. Box 486, McLean, VA 22101

NVFMA GENERAL MEMBERSHIP meeting was held at Fairhill Elementary School, Fairfax, Va on 20 Oct 94, 7 P.M. Awards of appreciation were given to KC4YXB for assisting an ill motorist; KC40CG for work associated with the .91 repeater, Skywarn and weather alert announcements and dependable and frequent technical service to our repeater system.

Special thanks and recognition was paid to WB4F'ND, KM401, KB4NRU and W4XG for running the weekly NVFXA Bulletin and continuous technical assistance to the association, respectively.

WA4PUJ, Dick Daniels gave a most interesting and informative presentation about AMSAT, its current satellite, operations, compatible ham equipment, and need for additional funding for equipment and launch costs.

If granted permission by Radio WTOP, cancellation of NVFMA meetings will be announced whenever inclement weather prevails during our winter months, Door prizes this month were an RF power

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Southern Maryland Amateur Radio Club

- ☛ Meetings: 2nd Friday of each month at 1930 at the PG County Police Clinton Station, 6707 Groverton Drive, Clinton, Maryland.
- ☛ Nets: Tuesday at 2000 on 147.15+ Repeater; Wednesday at 2000 on 1.865 (\pm QRM); Thursday at 2000 on 28.447 USB.
- ☛ PGARES: Thursday at 2100 on 147.15+ Repeater. All are welcome to join.
- ☛ Repeater: W3PT/R 147.15+, Cheltenham, Md. Autopatch to 911.
- ☛ Mailing: P.O. Box 273, Cheltenham, Md, 20623
- ☛ Information: Vic & Linda Curtis, WA3YUV & KA3VNI (301) 888-1388

It just seems like yesterday that we were putting the holiday decorations away and here it is time to pull them out again. This is an exciting time of year albeit quite busy. If you haven't noticed, our meeting location has been moved permanently to the Clinton PG Police station. Despite all our efforts, they just won't keep Ray in lockup. If you need directions, just call on the repeater.

Once again SMARC will be sponsoring our annual "CQ Santa" program. CQ Santa is designed to allow children who are in the hospital during Christmas to speak with Santa over a special radio link. During the week before Christmas we will be at the pediatric wards of Physicians Memorial Hospital in La Plata, and Southern Maryland Hospital Center, Clinton. Some of Santa's personal helpers will be manning the radios on the ward with the kids while others will be operating the radio link to Santa. While the plans are still being finalized, word is that Number One Elfy Sue, N3LVY, will be there again this year. The date and time will be announced over the repeater if you are interested in helping.

Again this year we are making special arrangements with Santa to speak on the repeater to the local children. Thanks to a very technical 2-meter to VHF link to the North Pole we are hoping to get a few minutes from Santa's very busy schedule to speak to his special people. Keep an ear to the repeater for the date and time.

Once again it is time for the annual SMARC Christmas dinner. This year it is being held on Friday, December 9th at the Elks Club Lodge in Camp Springs from 7 PM to midnight. The cost is a nominal \$15 per person. Contact Ray or Allen for reservations or additional information.

The bad weather is beginning to set in so make sure you have checked your emergency provisions. When the bad weather hits, put a fire in the fireplace, settle into your best easy chair, get a good book, and enjoy. Have a safe and enjoyable holiday and we will see you "next year".

73, Greg - WA3FSC

NVFMA - Continued from page 38

meter, NVFMA Shirt, ARRL Repeater Directories and the ARRL Antenna Handbook with software package. Lucky winners were KE4HWE, KC4YXB, AF40, KD4UPD, KE40WH, KD4DXA AMSAT's WA4PUJ

TECH TIP: For those of you experimenting in the microwave spectrum, recall these useful equations for the parabolic antenna:

$$G = 4\pi A \eta \lambda^{-2} \text{ where}$$

G = gain (dB)

$$\pi = 3.14$$

A = reflector area (meters)²

η = efficiency (0.55 - 0.70)

λ = wavelength (meters)

or

$$\lambda = c/f \text{ where}$$

$c = 3 \times 10^8 \text{ m/s}$

f = frequency (Hz)

$$\theta = 70\lambda D^{-1} \text{ where}$$

D = reflector diameter (meters)

$\theta = 3 \text{ dB beamwidth (degrees)}$

73, Ann, KD4GSU

Sterling Park Amateur Radio Club

- ✔ Meetings: 8:00 P.M. - Third Monday of the month except December, July and August at Sterling Community Center Annex, Church Rd. (Rt. 625) near Route 28, Sterling
- ✔ Mailing: Call Box 599, Sterling, VA, 20167
- ✔ Information: Dick Maylott, W4LMJ, 430-3842
Forrest Snyder, N4UTY, 430-4149

Those of you that found your way to the Boy Scout camporee site outside of Leesburg over October 15th or 16th witnessed a special Jamboree-on-the-air experience featuring station K2BSA/4, the special scout call sign which was authorized for use at this site. Jerry Geil, N4PCU, and Evan Mann, KM4SK are to be congratulated for their efforts in coordinating this special event. A number of other scout leaders including Lon Berman, AD4LD, and Dave Williams, K7HMP, also contributed to its success. Also, we would like to thank John Kanode, N4MM, our Roanoke Division Director, for coming by for the dedication.

The station display consisted of two HF rigs and a packet setup. One of them was a Ten-Tec "Scout", which K7HMP got on loan from the manufacturer. Antennas were hoisted to the top of a nearby grain elevator. Communication with the local area was maintained through the HRG repeater. Scout leaders were on hand to discuss amateur radio with the scouts, and actually demonstrate what you could do with it. Many JOTA contacts were made with amateur stations both in the United States and in many different countries. A number of maps and displays completed the setup, and much interest was shown by the boys in attendance.

Although you are reading this in the dead of winter, it was written at the end of a gorgeous fall. If you didn't get your antenna work done, you can't blame it on the weather. I know that a number of us did take advantage of the opportunity when the leaves were down and the weather was good to take aim with slingshot or bow and arrow, to improve our skywires for the winter. We are now in the midst of the contest season, and SPARC'ers will again be active on all bands, trying to accumulate respectable scores under lousy propagation conditions. Perhaps more will take to the VHF Sweepstakes in January where sunspots aren't of

concern. We've had some respectable contest listings this past year, but a lot more participation is needed. Our hats are off to Steve Harrison, KO0U, for an outstanding job of coordinating last year's Field Day, as well as all those who participated. QST listings showed us 5th of 27 entries in our category. Not bad for a small club "out for fun".

The poor DX conditions have made our QSL Bureau work a lot lighter. The volume of cards and envelopes is way down from a couple of years ago. The big boxes and mailbags from the foreign bureaus have been replaced by small boxes and large envelopes. The two or three "tubs" of mail which was in a typical week's pickup is now usually just a single tub.

A number of interesting topics are planned for future club meetings, but I don't have subjects and dates available as this is written. Also, we've given a lot of thought to starting a training program in the spring, perhaps culminating with a VE session. For late breaking information, feel free to contact us, or better yet, stop by a club meeting. As noted above, we meet at 8:00 the third Monday of the month except December, July, and August. The Sterling Annex is an old school just a block off Route 28 on Church Road (Route 625).

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T-MARC

THE MIDDLE ATLANTIC FM AND REPEATER COUNCIL, Inc.

- ✦ Meetings: Frequency Coordinating Committee normally meets the last Monday of each month, 19:30, in the OEP conference room of the Prince George's County Emergency Operations Center off Central Avenue.
- ✦ Address: P.O. Box 1022, Savage, Md. 20763-1022 for all correspondence.

Last month I forgot to thank Hank, N3ESR, for writing this column for the past couple of years. Due to job and family time constraints, Hank had to discontinue the effort, so I somehow got the job. Thanks, Hank!

As we mentioned last month, the Annual Meeting and election of officers for the next year is scheduled for February 5th, with a rain date of February 12th, at Alexandria, Va. Full details in next month's column.

We get many questions about frequency coordination, so with this column I plan to try to answer one of these questions each month. For a start, let's look at the question "Just what is frequency coordination?"

Basically, it is a form of voluntary participation in an organized program intended to keep interference between repeaters and their users to a minimum. To do this, repeater sponsors work with their local voluntary frequency coordinator, who maintains a database of repeater frequencies in active use (as well as any new repeaters which are under construction but may not yet be in operation). The coordinator recommends repeater operating frequencies (and perhaps other technical details) which will, hopefully, be compatible with other existing repeaters.

We've had recent correspondence with the SouthEast Repeater Association (SERA), the frequency coordinator to our south and west, regarding some proposed coordinations, as follows: 222.80/224.40 at Elliot's Knob, Va., which appears to be too close to the 224.40 repeater on Bull Run Mountain, near
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Manassas; 29.52/29.62 near Beckley, WV, which may be too close to the 29.62 repeater near Cumberland, Md.; and 449.475/444.475 at Norfolk, Va., which could have lock-up problems with the 444.475/449.475 repeater at Columbia, Md., since much of the path is over water.

Coordinations for a couple of proposed repeaters which never came to life were recently cancelled: 443.825/448.825 at Manchester, Md.; and 1273.90/1285.90 at Rockville, Md. The former sponsor of the 222.44/224.04 repeater at Newark, Del., advised us that he sold the machine to a new sponsor who moved the repeater to southeastern Pennsylvania, so that coordination was cancelled. Finally, the sponsors of the former 52.44 repeater in northern Virginia advised they are no longer using this frequency, so its coordination was also cancelled.

At the request of the sponsor, a UHF link frequency was coordinated to the 146.025/146.625 repeater at Princess Anne, Md., for a proposed remote receiver.

Here's another "rule of thumb" for you, which makes it very easy to know which way to set the offset on your radios for 2-Meter repeaters: for ALL repeaters on 147.00 MHz or lower, the offset is ALWAYS MINUS (-). On all repeaters above 147.00 MHz, the offset is ALWAYS PLUS (+). There are some variations to this "rule of thumb" in other areas of the U.S., but it does apply throughout the entire T-MARC area. In addition, ALL coordinated 2-Meter repeaters in our area use the standard 600 kHz offset, either + or -, as discussed above.

73, Gary, W3DTN, T-MARC PIO

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Doug Allen, Editor
8008 Shadow Oak Lane
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Woodbridge Wireless, Inc

- ✔ Meeting: Second Tuesday Each Month
- ✔ Springwoods and Chaucer, Lake Ridge Va.
- ✔ Monday Night Net: 2100 147.24 with 224.78 Link
- ✔ Repeater on 147.24 MHZ, Repeater on 444.90 MHZ, Repeater on 224.780 MHZ, Packet LAN on 145.07
- ✔ Mailing: P.O. Box 112, Woodbridge, VA 22194
- ✔ Information: Jim Stearns - KC4ZHQ (703)670-3480

WWI ELECTION OF NEW OFFICERS

Elections of club officers was held 11 October 1994. Congratulations to the following individuals elected.

PRESIDENT: Chris Edge, KQ4VN
VICE-PRESIDENT: Jim Neff, WJ4M
SECRETARY: Paul Bauer, N3DAN
TREASURE: Larry Keller, WD4EAT
ACTIVITIES: Bob Tyson, KR4F
BOARD: Stu Mitchel, WA0DYJ Dale Carlsen,
WA2IKI Ed Quinto, KD4KBT
TRUSTEE: Phil Poole, WB4FQR

ARRL VHF QSO PARTY

"Well Done" to the WWI operators that participated in the ARRL VHF QSO Party. The Flagpole Knob Contest Group, K4HWG, WB4RDV, WA0DYJ, K8MLM, K04FM, WB4NFS, WB4RMJ, WD4KXB, KJ4VG, and KA4RRU operated in the Multi-Multi Unlimited category, Mixed mode, and 1500 watts of power using the exchange information of W4IY/FMO8. Even through the conditions were flat, the group racked up a total score of 236,588 in 32 hours, 57 minutes of operation. Total Q's were 831.

W4IY Field Day '94

WWI setup Field Day operations at the Prince William County Complex on Davis Ford Rd. The main jest, besides looking to make a lot of contacts and building excitement in the club, was to introduce newcomers to some rapid fire communication operations that may exist during a real emergency. WD4KXB provided new ops with training on the logging system and

overall operating procedures and techniques. At the end W4IY fourth in the Class 6A, 3197 Q's, low power, 50 Ops for a total score of 11,076 points. A big round of applause to all the participants.

CQ WW DX Phone Contest

For the first time ever, WWI members using the call W4IY mounted a multi-multi (mm) operation in the CQ WW DX phone contest on 29-30 October. This is similar to field day but is a high power operation during which only DX stations are contacted, not states. The operation took place over Mike's, KA4RRU, QTH with two towers (60 and 90 feet), ten antennas, hundreds of feet of hardline, six amps, six computers, and ten operators. The scores are still being tallied, (Est. > 2.5 mil) but it looks like a great score. WD4KXB

Virginia "Hotfoot" Half-Marathon

Saturday, 1 October saw nine members of the WWI providing emergency communications support to the Prince William Runners Club for the half-marathon foot race in Prince William Forest Park. Members included Bob KR4KF; Denis, WD4KXB; Ed, KJ4VG; Tom AC4XT; Jim, WD4AIR; Brian, KE4QUJ; Sandy, WB4RHB; Vernon, KD4KWG; and Tom, KB7RLA, driving the WWI Emergency Communication Vehicle (ECV). The ECV really came in handy due to the Stafford repeater being moved to a new location and not reachable due to the terrain in which the operation took place. But as usual the "Hams" came up with a work around procedure. Ed, N4LJZ, has a simplex repeater in operation which filled the gap between the ECV and operators located in low areas in the park. The delay and repeat function did require some operator adjustment but the overall outcome was a success. No runners needed help and all went well. However, lessons learned, it highlighted the need to have a repeater with a tower mountable antenna for the ECV. Also it identified the need for a "HOB" Ham On a Bike.... to follow the last runners home. Bob, KR4KF.

73s, WWI FAR Rep., Jim, KC4ZHQ

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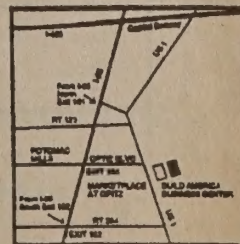
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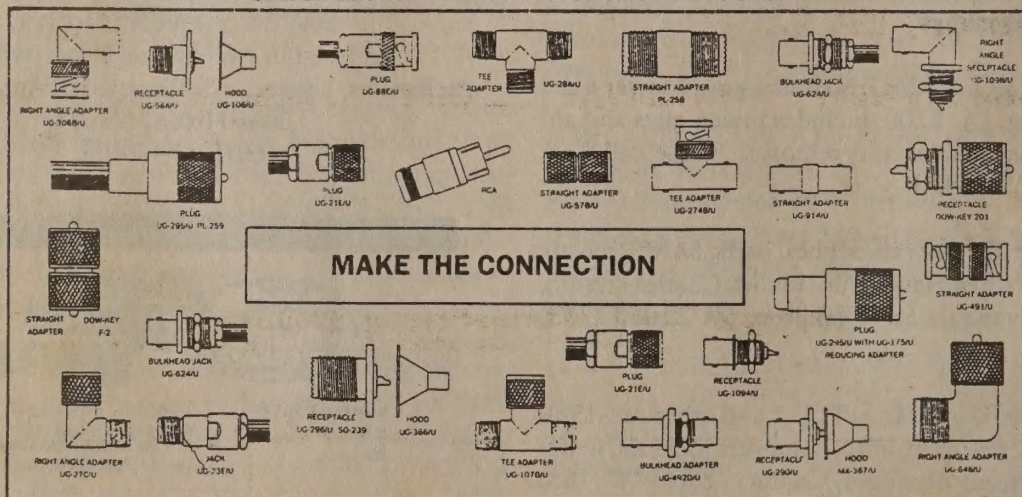
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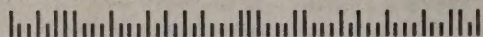
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